Panasonic

Projection Television
Operating Instructions

Model No.   **TC-** 47P500 Series
TX- 47P500 Series

[tau]

FLAT
DIGITAL
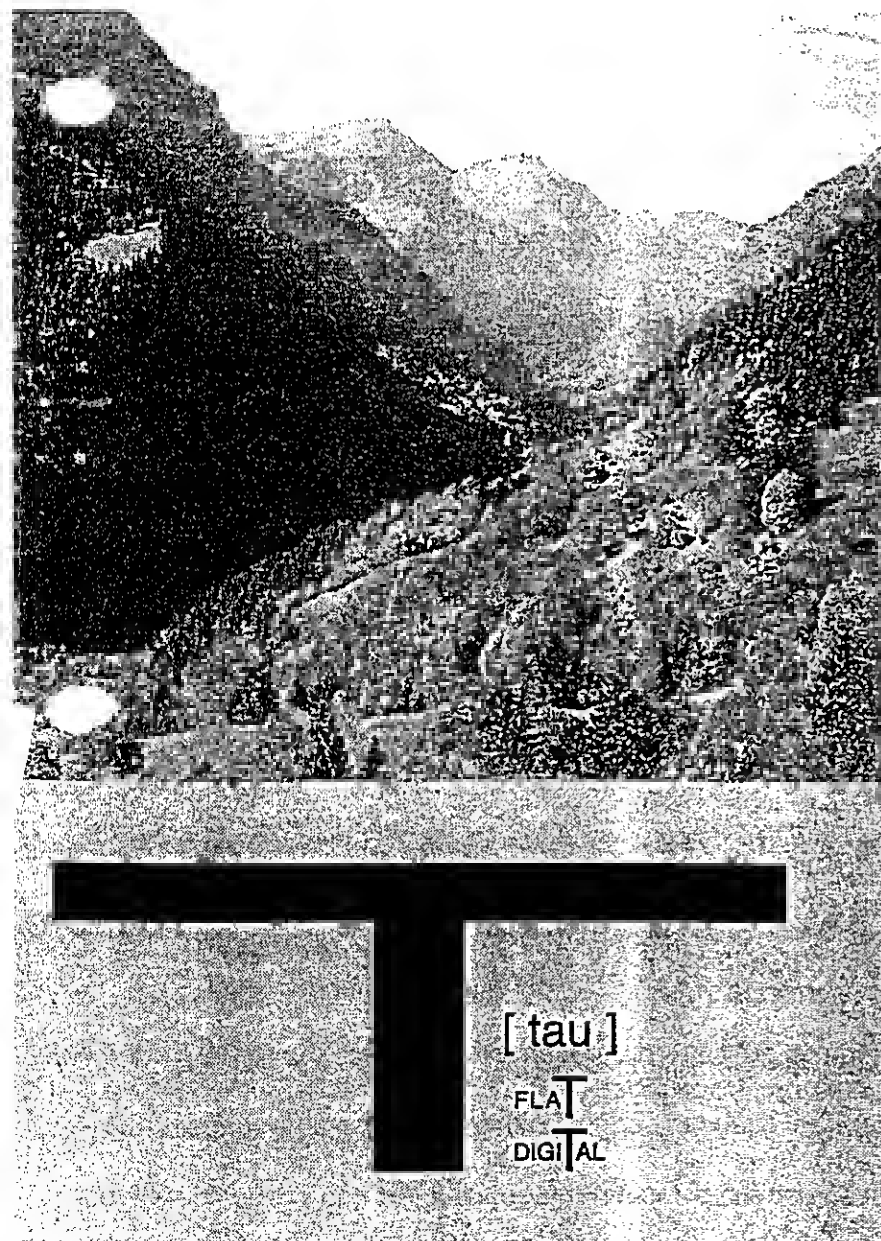
This is a combined Operating Instruction manual for all the above series of models.

Please read these instructions before operating your set and retain them for future reference.

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new Projection television set.

To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference.

Retain your purchase receipt also, and note down the Model Number and Serial Number of your set in the space provided on the rear cover of these Instructions.
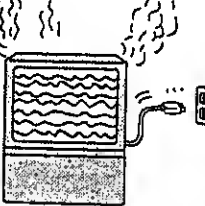
Visit our Panasonic Web Site   http://www.panasonic.co.jp/global/

Important Information
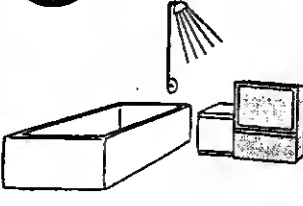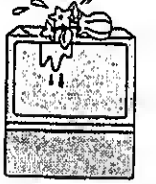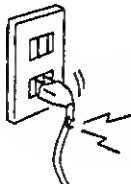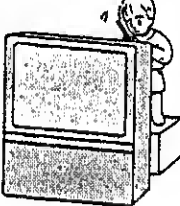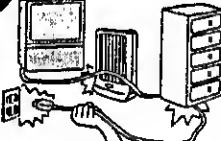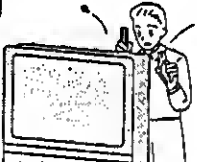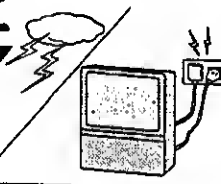
(1) The long time (max. 2 hours) use of TV game on the set is not recommended since the signal from TV game may be the cause of damage on picture projection tubes on the set.

(2) Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Projection TV screen.
Examples of still pictures include logos, video games, computer images, teletext and images displayed in 16 : 9 mode.
If still picture cannot be avoided, reduce the brightness and contrast levels of the picture to minimize any damage that might occur.

(3) In order to minimize any damage to the projection tubes, this set uses the PICTURE SHIFT function (Refer to page 35) to change (shift) the entire picture approximately 2 mm every 15 minutes.

Table of contents

Warnings and Cautions

⚠ Warnings
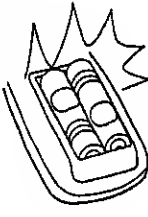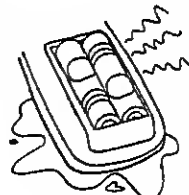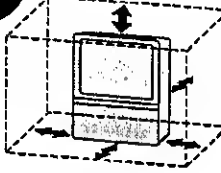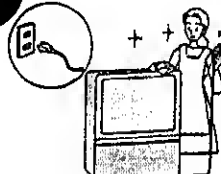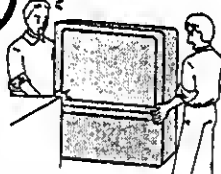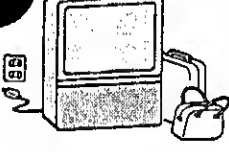
Unplug the power cord in the event of any malfunction (screen goes blank, no sound, odd sounds, smoke or unusual odors coming from the unit). Unplug the power cord if foreign matter or water falls into the unit, or if the unit is dropped or the cabinet is damaged.

DO NOT use this unit near water. (Near a bath tub, etc.)

DO NOT place any of the following on the unit: Flower vases, flower pots, cups, small metal objects, or cosmetics containers, chemicals or water.

DO NOT use if the power cord or power plug is damaged, or if the plug does not fit tightly into the socket.

DO NOT insert foreign objects (metal or easily flammable objects).

DO NOT use at a voltage other than indicated

TAKE CARE NOT to damage the power cord.

DO NOT remove the rear cover as live parts and High Voltage components are accessible when the rear cover is removed.

DO NOT touch the aerial cable and this unit when there is lightning.

DO NOT touch the power plug if your hands are wet.

⚠ Cautions

DO NOT place in humid or dusty location, or areas exposed to smoke or steam. DO NOT place in direct sunlight and other sources of direct heat.

DO NOT place in an unstable location.

DO NOT stand, or place heavy objects on the unit. Particular care should be taken by families with small children.

Place in a safe location.

Fix the TV to a wall. (refer to page 8)
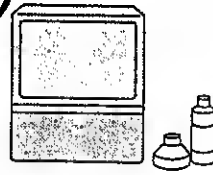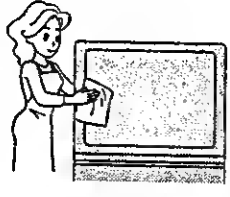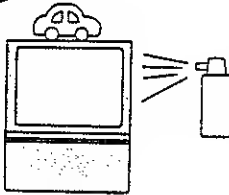
⚠ Cautions

❗	When inserting batteries, ensure that the polarities (positive and negative) are correctly aligned. Insert as shown on remote control. If inserted incorrectly, battery fluid may leak, and fire, injury, or damage to surrounding components may result.	🚫	Do not mix new and old batteries. Use only the specified batteries. Failure to follow this precaution may result in leakage of battery fluid. Fire, injury, or damage to surrounding components may also result.
❗	Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 10 cm (◄──►) is left all around this unit even when it is placed inside a cabinet or between shelves.	❗	Turn the power "Off" before connecting other electrical equipment.
❗	Before cleaning, unplug the power plug from the socket.	🚫	DO NOT joint the unit.
❗	Unplug the power plug from the socket if you are not going to use the unit for an extended period.	❗	Ask your sales outlet to Install the aerial.

Cleaning ——— To ensure continued excellent performance by this product, periodic cleaning is recommended

🚫	The unit contains many plastic parts. For this reason DO NOT use benzine, thinner or other chemicals to clean the unit.		Dust will accumulate on the picture screen. Please wipe with the supplied soft cloth from time to time. If you use a chemically treated cloth, please be careful to follow the instructions that come with the cloth.
🚫	DO NOT bring into contact with insecticide or other volatile substances. DO NOT allow the unit to come into contact for extended periods with rubber or vinyl products.		Remove dirt and soiling by wiping with a light cloth. Even if the unit is heavily soiled, do not apply cleaner directly to the unit. Soak a cloth in a solution of neutral cleanser thinned with water. Then wring out the cloth, wipe the unit clean, and finish by wiping with a dry cloth. Do not use any type of cleansers on the picture screen.

Before Operating This Set

How to Use This Manual

Check the Model Number of your TV set; the Model Number is shown on the rear cover name plate on the set. Use the table on the opposite page to confirm which features your particular Model is equipped with. This will help you to know which sections of the manual apply to your set.

Stand By

Picture

Sound

Set Up

Stereo / Mono / 'Bilingual

Mute

Programme Number Up
Volume Up

Volume Down
Programme Number Down

TV / AV / RGB

Coloured Buttons. Used for Aspect Functions, AV Selection Teletext Functions

100Hz / Progressive Scan

Surround

Aspect

Multi Picture in Picture #

Recall

Still
Channel Search #

Direct Programme Numbers

Two Digit Programme Numbers

Normalisation

Store

Help

Door

Note:

• Mainly the remote control for   is used as an example in the Operating Instructions:

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Quick Reference Guide for your TV Set

Please check the model number of your set.
This Manual applies to several Models and there are slight differences among them.

Please check the table below to see what your TV is equipped with before you begin using these Operating Instructions. Instructions are given for all functions, please disregard these which do r ~t apply to your TV.

Model Number		TC-47P500H	TX-47P500H
Destination	China		
	Hong Kong	*	
	Southeast Asia		*
	Australia		*
	NZ		*
	Middle East		
Multi Language	English	*	*
	Chinese	*	*
	Arabic		
Power Source	AC 110-240 V 50 / 60 Hz		
	AC 220-240 V 50 / 60 Hz	*	*

* : Function available

Securing the casters

To prevent the set from tipping forward, turn the two casters on the front of the TV so they face forward, as shown in the picture.
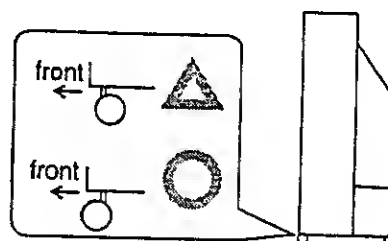
Connecting the Aerial Cable to the RF In Terminal

VHF Aerial   UHF Aerial

Mixer

75 Ohm
Coaxial Cable

RF In Terminal

Coaxial Aerial Plug
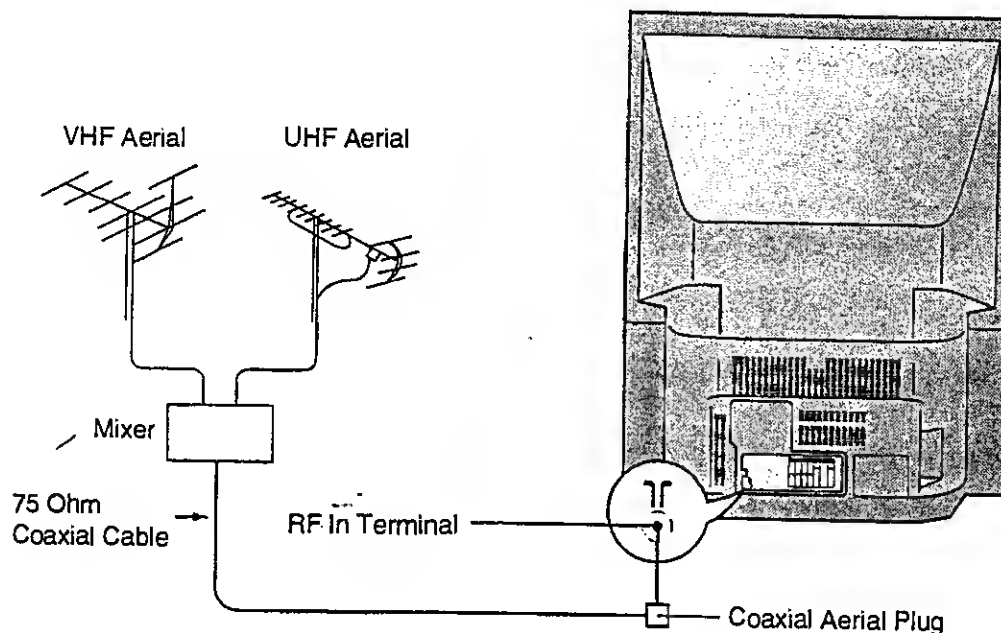
To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ohm coaxial) and the correct terminating plug are required.

If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and your set.

Your local Television Service Centre or Dealer may be able to assist you in obtaining the correct Aerial system for your particular area and accessories required.

Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

Coaxial aerial plug

RF In
Terminal

75 Ohm Coaxial Cable
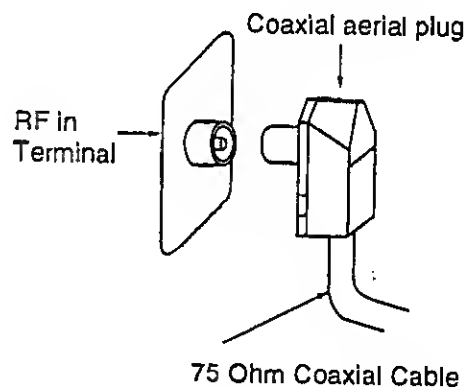
Safety Precaution

Please take safety precautions to prevent the unit form falling over.
The unit may fall over during earthquakes, or if someone stands on or shakes the TV.
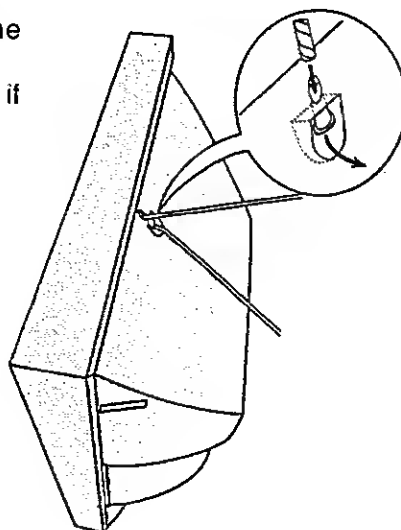
Fixing to a wall
Use a strong rope or a chain to fasten the TV firmly to a strong support such as a wall or a pillar.

Connecting the Plug to the Wall Outlet
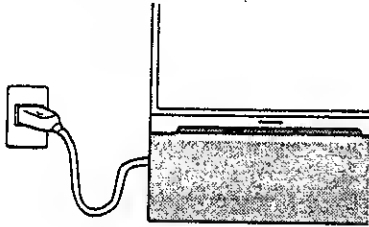
Note:
Main plug types vary between countries. The main plug shown at left may therefore not be the type fitted to your set.

How to Turn the Power On

Power OFF

Power Indicator
No light: Power OFF condition

Power Indicator

Power Switch

Note: Even when the Power Switch is "OFF", the TV set will still consume a small amount of power.

Push the Power switch on Television to turn the set on.

Power ON
Power Indicator
No light: Normal viewing condition
Red : Stand by
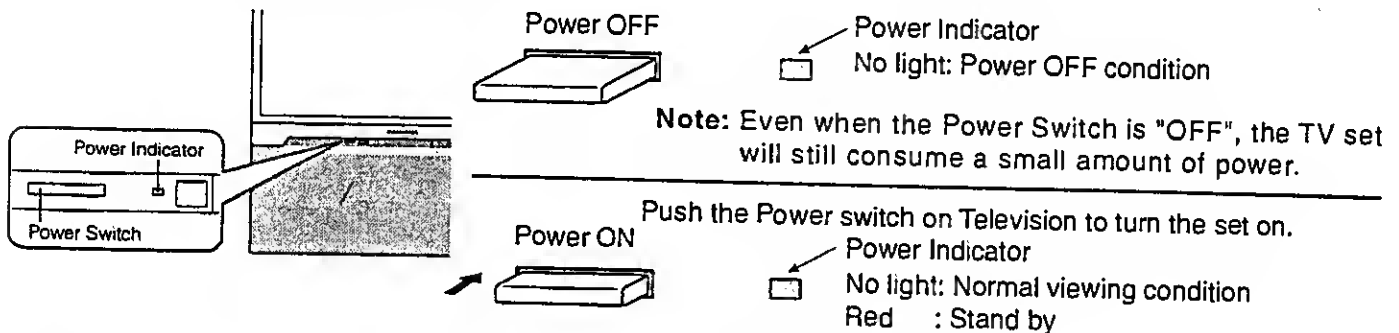
Notes:
• When In the Stand-by condition (Refer to page 15), it is also possible to turn the TV set on by pressing any of the "Direct Programme Number Selection buttons" (0~9) or "Programme Number Up or Down buttons" on the TV set or on the Remote Control.
• If the Wall Outlet is switched OFF or the Main Plug is unplugged, when the TV set is again turned ON (by either connecting the Main Plug to the Wall Outlet or switching the Wall Outlet ON), it will have returned to the original state.

Battery Installation

1 Open the cover.
Apply slight downward pressure while pulling towards the bottom.

2 Batteries: Use two "R6 (AA)" size batteries.
Insert the batteries ensuring the correct polarities.
This is identifiable by the "+" and "−" symbols on the batteries and inside the battery compartment.
Two "R6 (AA)" size

3 Replace the cover.
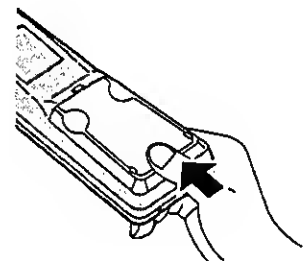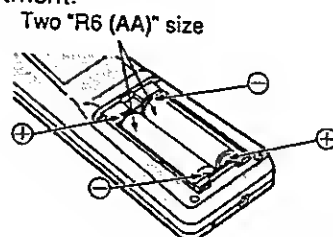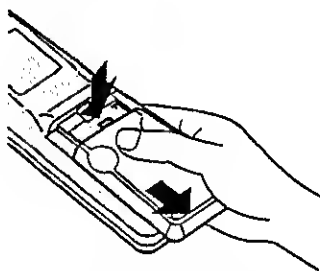
Do not use rechargeable (Ni-Cd) batteries.
They are different in shape and performance and may fail to ensure correct operation.

⚠ Battery cautions

The incorrect use of batteries can cause electrolyte leakage which will corrode the Remote Control or cause the batteries to burst.

Old Batteries
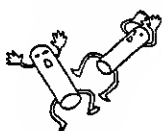
New Batteries

Replace both batteries at the same time.

Don't mix diffrent battery types (alkaline with carbon zinc, etc.)

Don't Recharge.

Location of Controls

Controls and Terminals on the TV
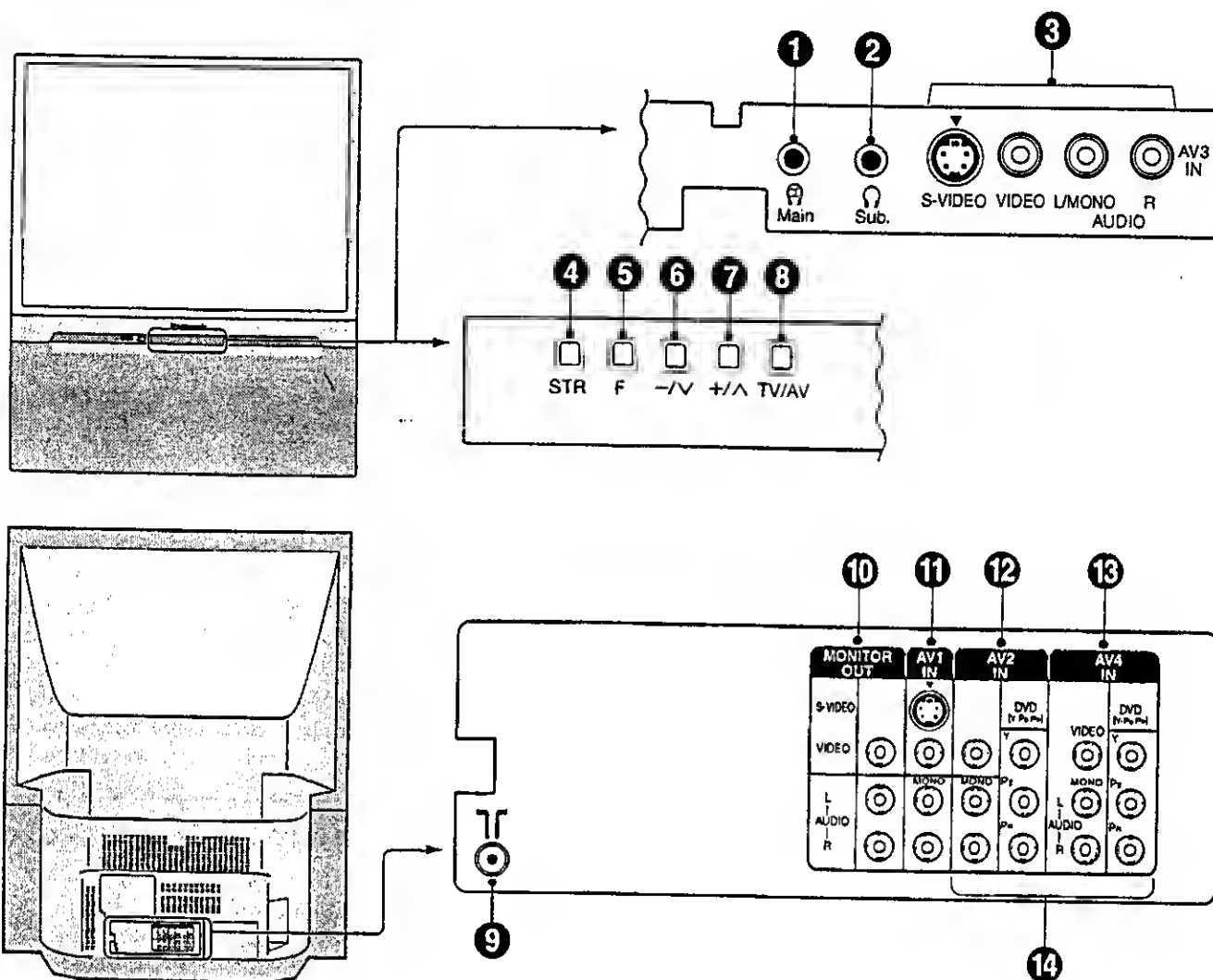
Item No.	Function	Refer to Page	Item No.	Function	Refer to Page
❶	Main Headphones Jack	13	❽	TV/AV Selection	14
❷	Sub Headphones Jack	13	❾	Aerial Terminal (RF In Terminal)	8
❸	AV3 Input Terminals	11	❿	Monitor Output Terminals	12
❹	STR	14	⓫	AV1 Input Terminals	11
❺	Function	14	⓬	AV2 Input Terminals	11
❻	Volume Down (−) / Programme Number Down (∨)	14	⓭	AV4 Input Terminals	11
❼	Volume Up (+) / Programme Number Up (∧)	14	⓮	DVD (Y. P_B. P_R) Input	12

Connections

How to connect the "AV1, 2, 3 or 4" Input Terminals

Connect VCRs and other peripheral equipment

(VHS VCR)

(Super-VHS VCR)
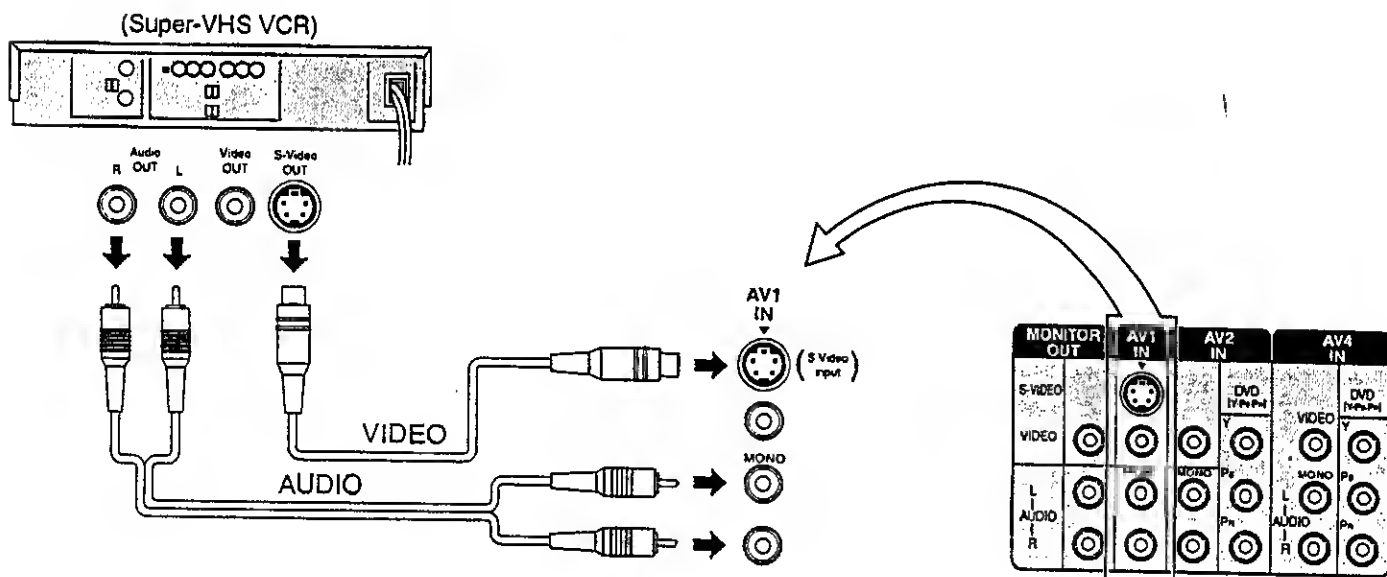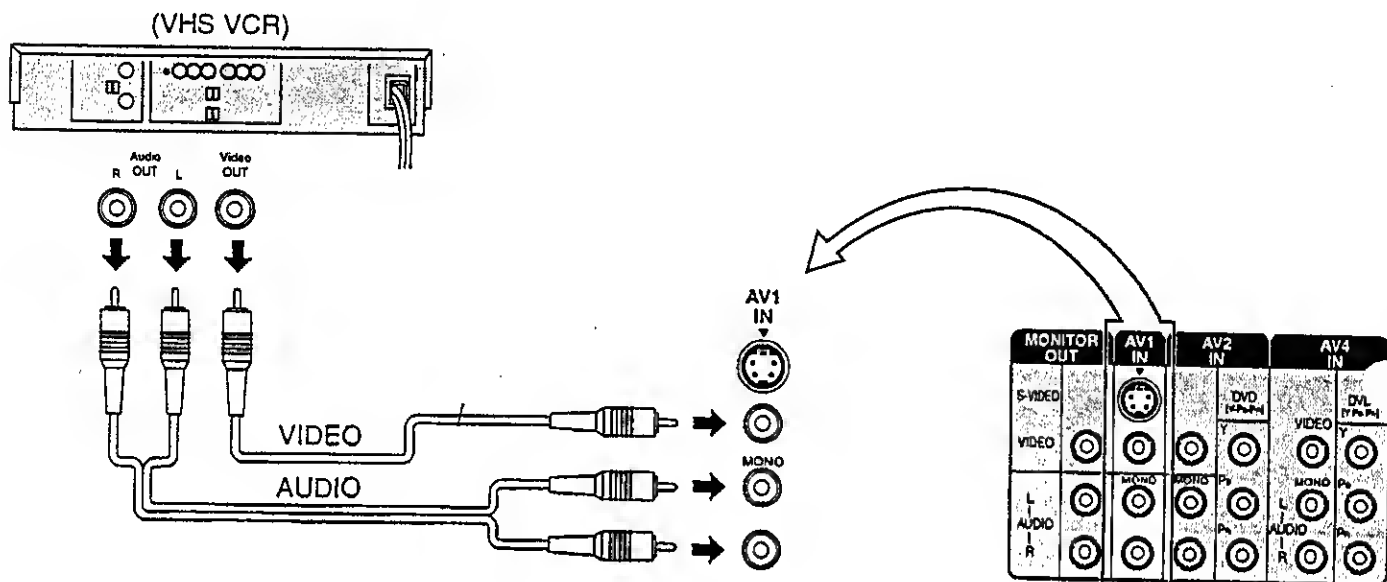
Notes:
- When an S-Video cable is connected to the S-Video terminal, the Video input will be automatically switched off AV mode.
- When a Monaural VCR is used, connect the Monaural Audio cable to the Audio "L" (Left) terminal.
- Select the desired AV input position by pressing the TV/AV button. (Refer to page 15)
- Input 3 is located on the front of the unit.
- The AV2 and AV4 audio input terminals serve as the audio input terminal for both the Video input and the DVD input.

How to connect the DVD Input Terminals

DVD Player
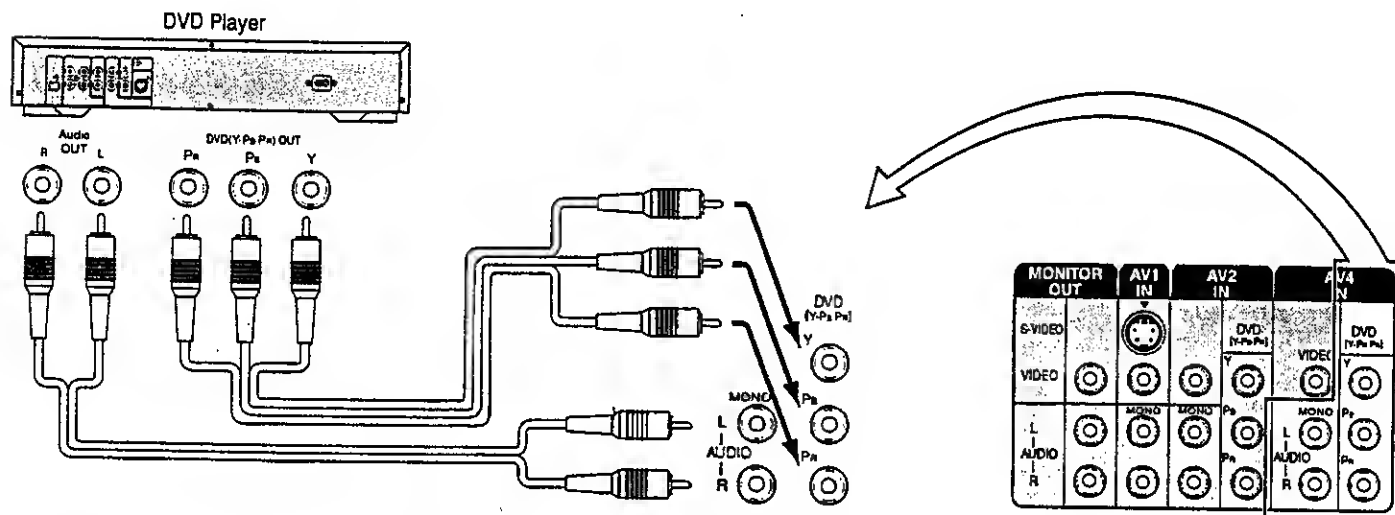
lotes:
- The AV4 audio signal is common for both AV4 and DVD input signal terminals.
- The DVD signal input terminal takes priority over the AV4 video signal input terminal.
- Similar connection are available at the COMPONENT VIDEO input 2 terminal.

How to connect the AV Monitor Output Terminals to other equipment

The "Monitor Out" Terminals output the same signals as main picture on the TV screen and sound from the speaker at that time, e.g. TV programmes or signals from AV1, AV2, AV3 or AV4 input.

Recording Equipment
(VHS VCR)
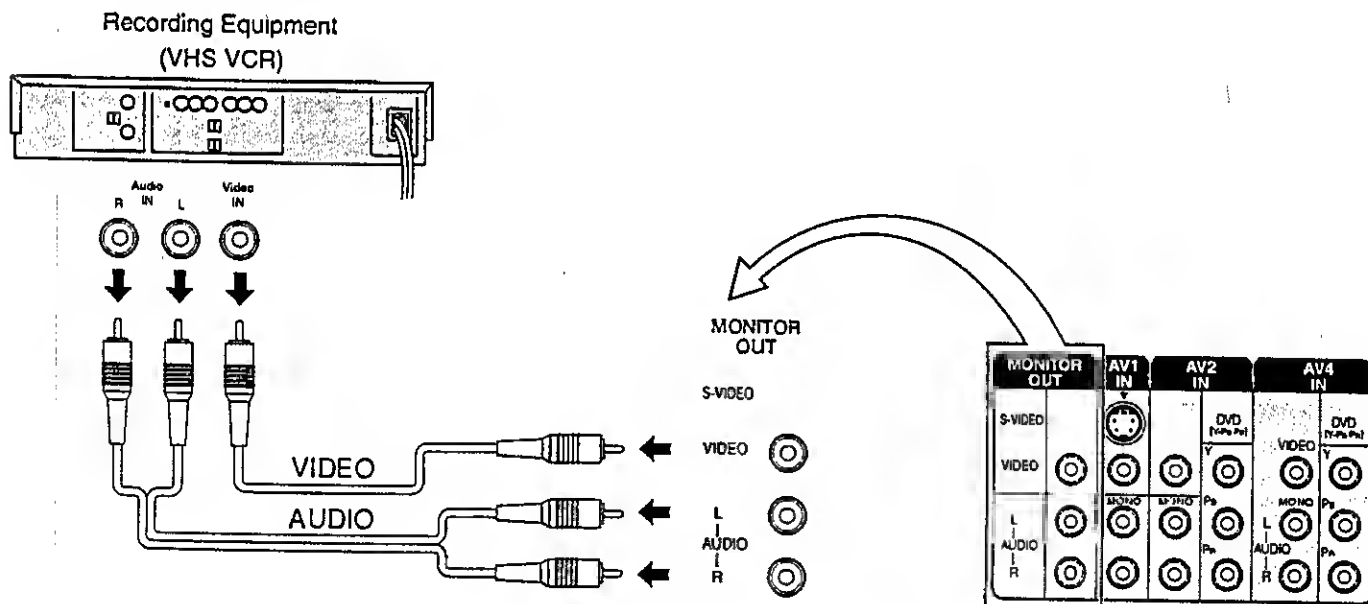
Notes:
- Never connect the same video recorder with both the VIDEO IN and MONITOR OUT terminals on this TV set, as this could cause incorrect operation.
- The monitor output emits the main picture normal video and audio signals.
- Teletext display on screen will not be output at the MONITOR OUT terminals.
- Even if the television is in picture-in-picture condition, MONITOR OUT terminals output the same signals as main picture on the screen and sound from speakers. Sub picture including strobe, still, channel search, etc. will not be output at the MONITOR OUT terminals.
- The DVD signal (Y, P_B, P_R) is not output at the MONITOR out terminals.

Connecting Headphones

Connect headphones as follows.

(3.5mm Plug)

(Optional)
(not supplied)
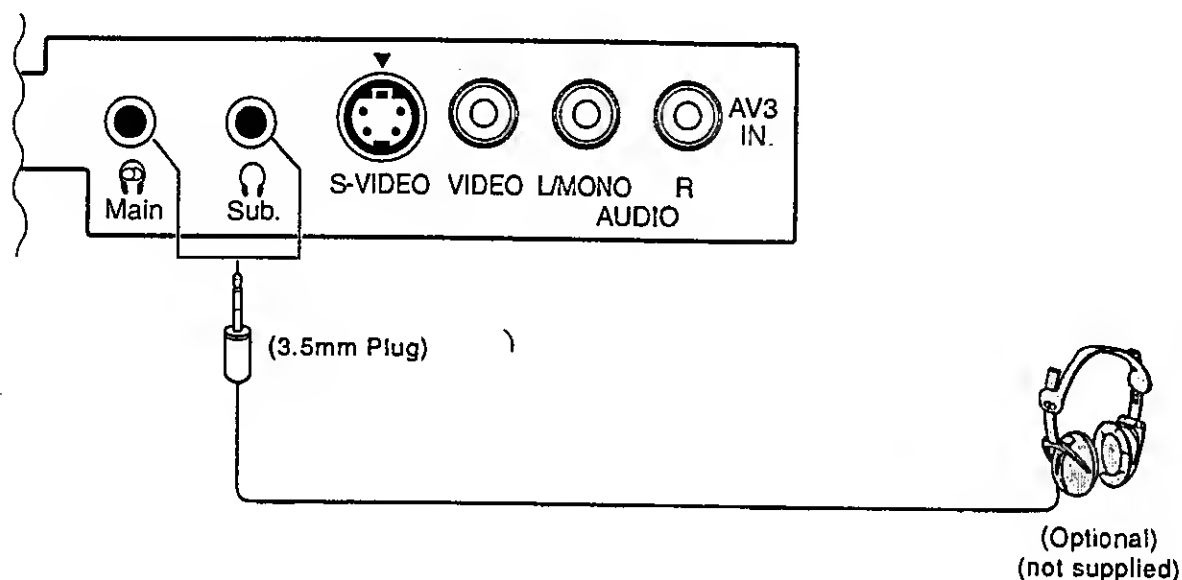
You can listen to sound from each of the headphones plugs as shown below.

Screen condition		Speaker Sound	Main Headphones	Sub Headphones	Monitor Output
Single picture/ Teletext	A	A (Stereo)	A (Stereo)	A (Mono)	A (Stereo)
Picture in Picture	A [B]	A (Stereo)	A (Stereo)	B (Mono)	A (Stereo)
Picture in Picture/ CHANGE	B [A]	B (Stereo)	B (Stereo)	A (Mono)	B (Stereo)

Main Headphones plug:
When a Main Headphones plug is inserted into the Headphones socket, all speakers will be automatically disconnected; only the Main Headphones will function.
Use Volume Up "+" or Down "-" button to control volume level.
Sub Headphones plug:
For the sub Headphones volume control, refer to page 32.

General Operation

Power switch

TV/AV Selection

Volume Up (+) /
Programme Number Up (∧)

Volume Down (−) / Programme Number Down (∨)
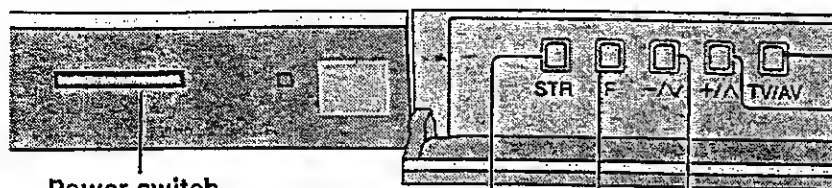
STR
Used to store tuning and other function settings. Also used to start the menu demonstration.

Function selection
Displays the on screen display functions, use repeatedly to select from the available functions.
The following adjustments can be accessed directly.

VOLUME	TUNING MODE
CONTRAST	BALANCE
BRIGHTNESS	TREBLE
COLOUR	BASS
SHARPNESS	NTSC-TINT
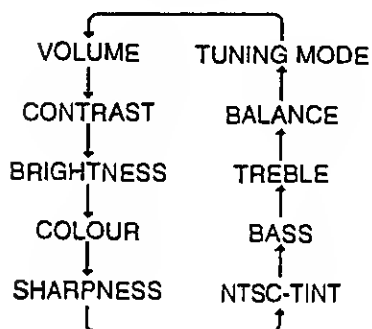
Notes:
- NTSC-TINT: Displayed when receiving NTSC signals.
- TUNING MODE : Not displayed during AV mode.

Picture Menu (see page 16, 30)

Sound Menu (see page 16, 32)

Set up Menu (see page 17, 34)

Stereo/Bilingual Sound Selection
(see page 41)

TEXT Favourite Page Selection
(see page 39)

TV/TEXT Selection (see page 37, 38)

100Hz/PROGRE (see page 31)

Surround (see page 32, 33)

Picture in Picture Selection
(see page 36)

Recall
Press to display the current system status, for example, Programme number, Channel number, Stereo mode, Picture menu, Sound menu, Scan mode, Sound system and colour system.

VCR/LD/DVD Rewind/Review

Normalization (see page 31, 33)

Store (see page 28, 29, 39)
Stores some settings in TUNING menus and TELE TEXT.

Picture AI (see page 31)

Picture Noise Reduction (see page 31)
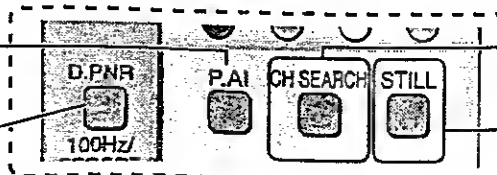
Channel Search
(see page 37)

Still (see page 37)

D.PNR 100Hz/   P.AI   CH SEARCH   STILL

Power (Stand-by) (see page 9)

The TV set must first be plugged into the wall outlet and turned on at the power switch. Press this button to turn the TV set On from Standby mode. Press it again to turn the TV set OFF to Standby mode.

Note:

• It is also possible to turn the TV set on from STANDBY mode by pressing the "Direct Programme Number Selection" Buttons (0-9) and the "Programme Number Up or Down" Button, either on the set or on the Remote Control.

Sound Mute

Press to mute the sound completely the "Mute" symbol will appear. Press again to restore the previous sound level, and cancel the mute.

Programme Number Selection

Press to select the next higher or lower Programme number.

Volume Adjustment

Press to increase or decrease the sound volume level.

VOLUME ━━━━━━━ 18

Coloured buttons used for Multi Screen functions (see page 36)

Teletext functions (see page 38)

AV selection (see page 15)

TV/AV Mode Selection

Press to select TV, AV1, AV2, AV3 and AV4 input signal modes sequentially.

Remote control : TV/AV

| AV1 | AV2 | AV3 | AV4 |

Press to display AV1 - AV4 at the bottom of the screen. Each coloured button corresponds to each input signals. For example, pressing the Red button selects AV1.

TEXT Index (see page 40)
/Channel Search (see page 37)

TEXT hold (see page 39)
/Still (see page 37)

Direct programme Number

• **Direct Programme Number Selection (CH SELECT = DIRECT)**

You can select the number directly by pressing the corresponding programme number buttons.

Programme Number 8....... [8]

Programme Number 36..... [3], [6]

Programme Number 124... [1], [2], [4]

• **Direct Programme Number Selection (CH SELECT = POSITION)**

You can select the numbers directly by pressing "Number 0-9" buttons or by pressing "Two Digit" and "Number 0-9" buttons.

Programme Number 8 ..... [8]

Programme Number 12.... [−], [1], [2]

VCR/LD/DVD Play

VCR/LD/DVD Fast Forward/cue

VCR/LD/DVD Stop

VCR/LD/DVD Control (see page 41)

Help (see page 16)

Note:

• When the Skip setting for Programme Number 100 through 125 is on, the channel selection time will be shortened, and thus you can not input three digits at a time.

Panasonic

PICTURE

SOUND

SET UP

I/II

TV/TEXT

100Hz/PROGRE

SURROUND

MULTI PIP

F.P. INDEX HOLD
      CH SEARCH STILL

1 2 3
4 5 6
7 8 9
+ 0 -/--

LD/DVD
REC-VCR
N STR HELP A DISC SIDE B

15
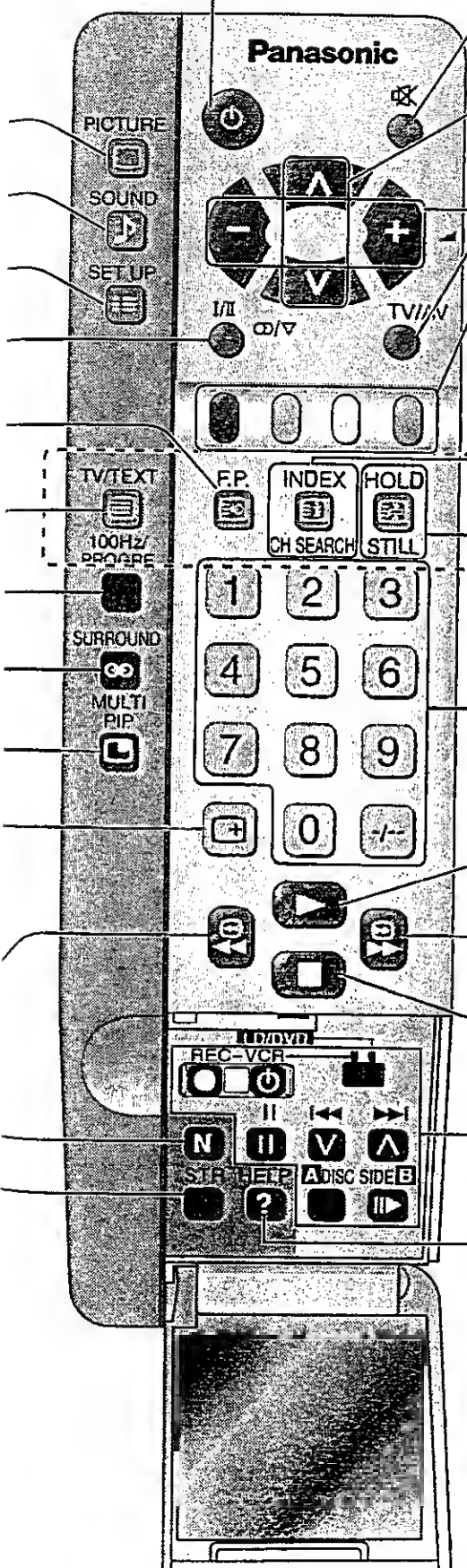
On-Screen menu Display from Remote Control

To PICTURE adjust menu
(see page 30)

PICTURE	
MENU	STANDARD
CONTRAST	
BRIGHTNESS	
COLOUR	
SHARPNESS	
NTSC-TINT	
C. TEMP	STANDARD

PICTURE	
P-NR	AUTO
AI	ON
SCAN MODE	AUTO
▼	
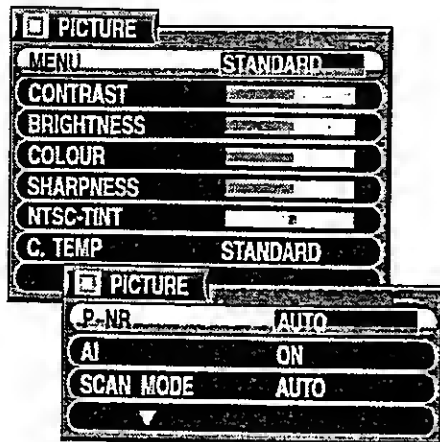
To SOUND adjust menu
(see page 32)

SOUND	
MENU	DYNAMIC
VOLUME	
BASS	
TREBLE	
BALANCE	
HEADPHONE VOL.	
SUB HEADPHONE	
SURROUND	OFF

To HELP MENU

HELP MENU
HOW TO USE THE MENUS
: MOVE BETWEEN MENU OPTIONS
: ADJUST OR ACCESS CHOSEN OPTION/MENU
: OPEN OR CLOSE THE MENUS
: GO BACK TO WATCHING
CONNECTION ACCESS
MENU DEMO
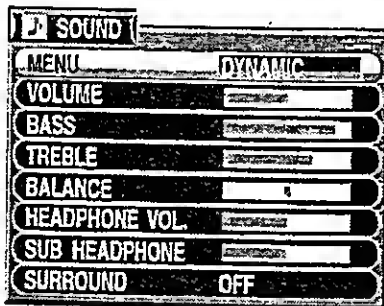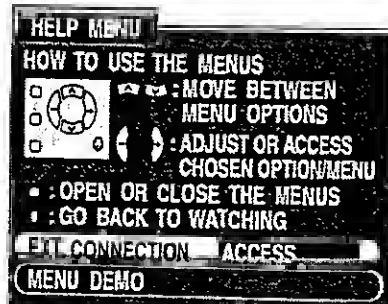
The HELP button runs a demonstration of on screen display menus available.
Press the HELP button and select one of the options.

Panasonic

PICTURE
SOUND
SET UP
1/II   ⏻/∇   TV/AV

TV/TEXT
100Hz/ PROGRE
SURROUND
MULTI PK.

F.P.   INDEX   HOLD
CH SEARCH STILL

1	2	3
4	5	6
7	8	9
⊞	0	-/-

LD/DVD
REC-VCR

STR HELP DISC SIDE

To SETUP MENU
(see page 34)

SETUP MENU	
TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
TEXT SELECT	ENGLISH

SETUP MENU	
CHILD LOCK	OFF
PICTURE SHIFT	OFF
TUNING MENU	ACCESS
CONVERGENCE	
LANGUAGE	ENGLISH
▼	
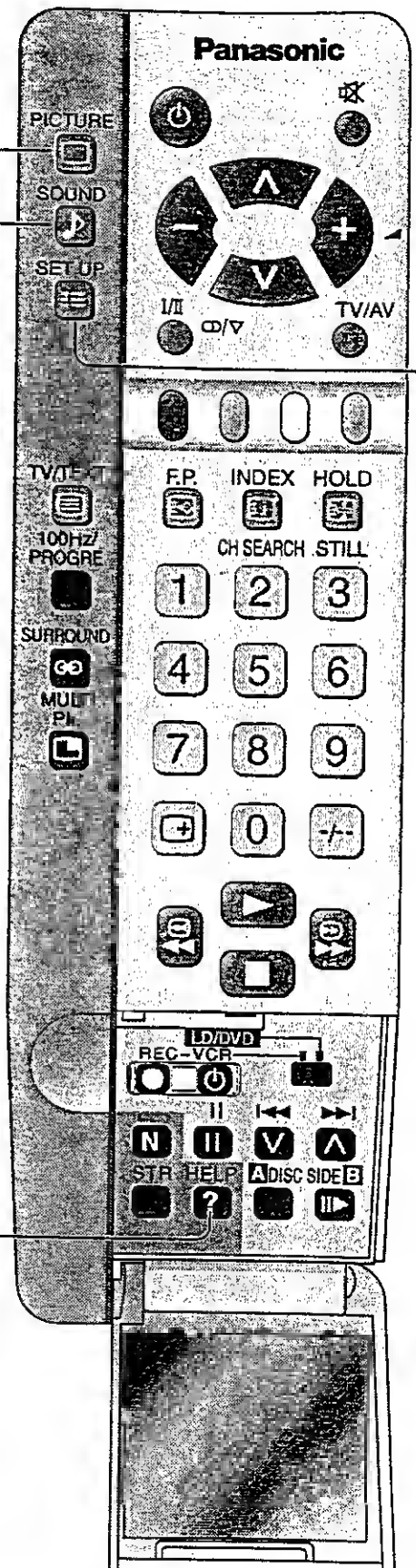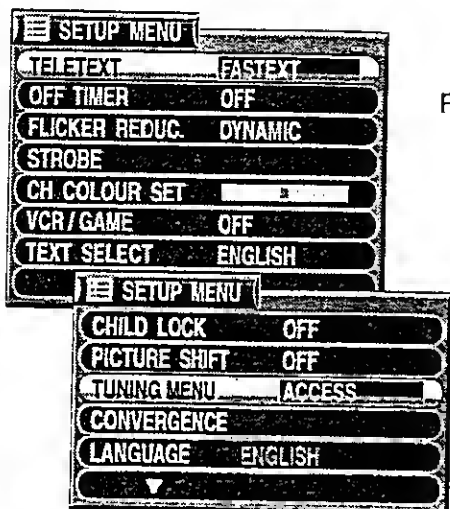
Press to access to TUNING MENU
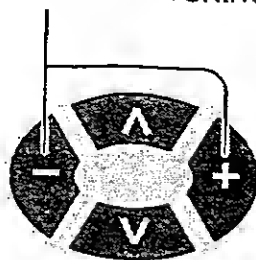
To TUNING MENU
(see page 21)

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	E.EUROPE
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

SETUP MENU	
TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
TEXT SELECT	ENGLISH

SETUP MENU	
CHILD LOCK	OFF
PICTURE SHIFT	OFF
TUNING MENU	
CONVERGENCE	ACCESS
LANGUAGE	ENGLISH
▼	
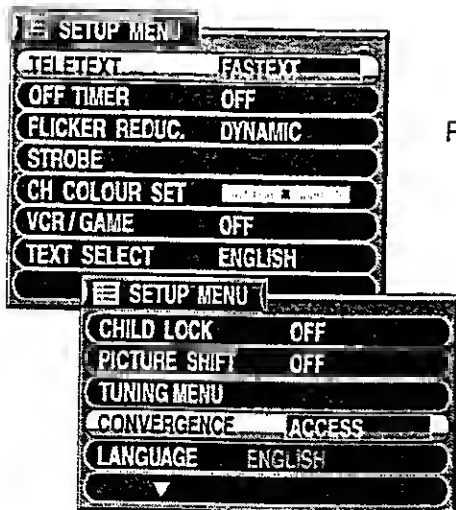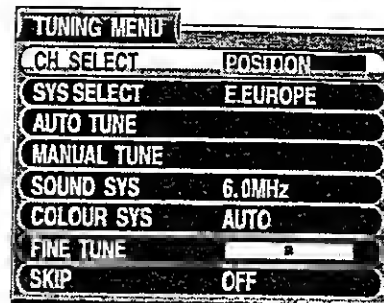
Press to access to CONVERGENCE
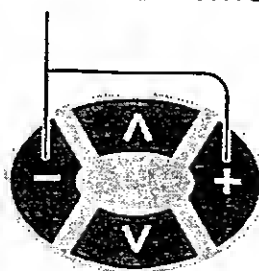
To CONVERGENCE
(see page 18)

SELECT
ACCESS
RETURN - TV / AV - EXIT

CONVERGENCE 1	ACCESS
CONVERGENCE 2	

SELECT
ACCESS
RETURN - TV / AV - EXIT

CONVERGENCE 1	
CONVERGENCE 2	ACCESS

17
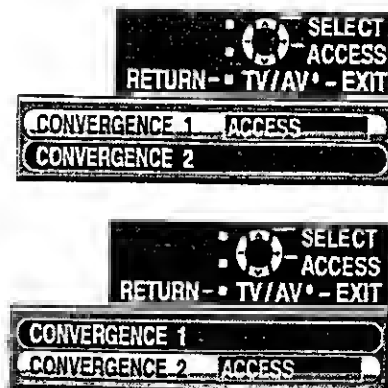
Convergence Adjustment

Convergence Adjustment mode
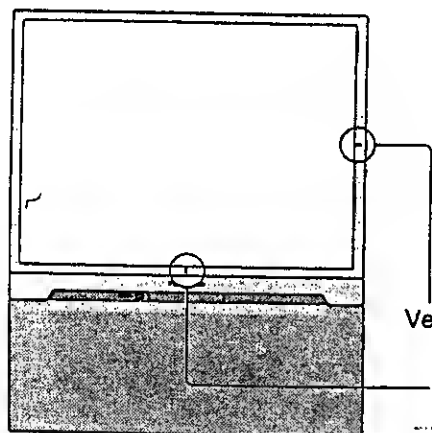
Prior to adjustment, tune the broadcast signal to the video input signal and operate the set for more than 60 minutes. If the location or direction of the set is changed or moved, the display may be out of alignment.

If necessary, carry out the following procedures once with PAL signal and again with the NTSC signal.

Vertical centre marker

Horizontal centre marker

1

SET UP

Press to display the Setup Menu.

2
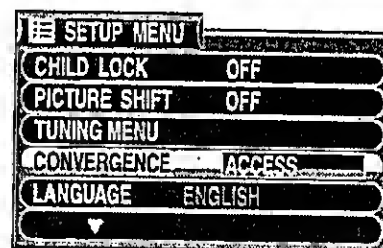
Press to select the "CONVERGENCE".

Press to access to the "CONVERGENCE" menu.

SETUP MENU
CHILD LOCK   OFF
PICTURE SHIFT   OFF
TUNING MENU
CONVERGENCE   ACCESS
LANGUAGE   ENGLISH

3
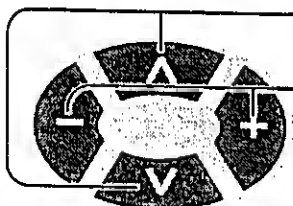
Press to select the "CONVERGENCE1" or the "CONVERGENCE2".

Press to access to the function.

SELECT
ACCESS
RETURN- TV/AV - EXIT
CONVERGENCE 1   ACCESS
CONVERGENCE 2
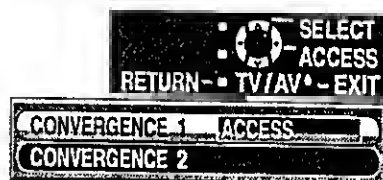
Example: CONVERGENCE1 is selected.

Convergence1 Adjustment for RED, BLUE and GREEN

RED

Press to align the horizontal red line with the horizontal blue line.
(Becomes a white line)

Press to align the vertical red line with the vertical blue line.
(Becomes a white line)

Press [N] button to adjust the blue mode.
(Stores RED)

CONVERGENCE

RED
ADJUST
ADJUST
TV/AVo-EXIT
N-BLUE

BLUE

Press to align the horizontal blue line with the horizontal yellow line.
(Becomes a white line)

Press to align the vertical blue line with the vertical yellow line.
(Becomes a white line)

Press [N] button to adjust the green mode.
(Stores BLUE)

CONVERGENCE

BLUE
ADJUST
ADJUST
TV/AVo-EXIT
N-GREEN
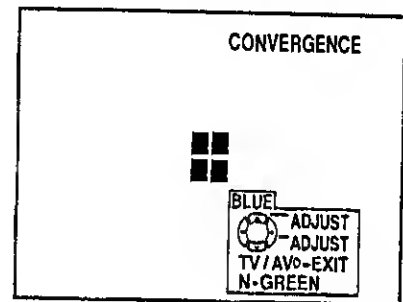
Only when cannot adjust with RED and BLUE, proceed to the following GREEN Adjustment.

GREEN
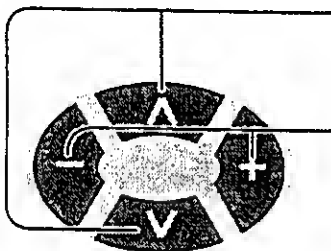
Press to align the horizontal green line with the vertical centre maker.

Press to align the vertical green line with the horizontal centre maker.

Press [N] button to adjust the red mode.
(Stores GREEN)

Vertical centre marker

CONVERGENCE

GREEN
ADJUST
ADJUST
TV/AVo-EXIT
N-RED

Horizontal centre marker
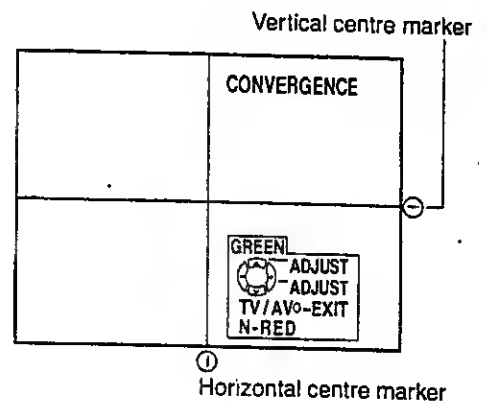
TV/AV

Press at any time to return to the normal viewing.

Convergence2 Adjustment for RED and BLUE

This function adjust the convergence of the side part of the screen.
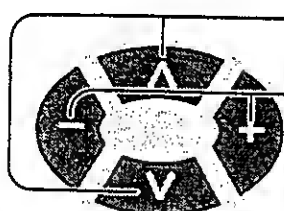
Press to select the CONVERGENCE2.

Press to access to the function.

```
            SELECT
            ACCESS
RETURN - TV/AV - EXIT
CONVERGENCE 1
CONVERGENCE 2    ACCESS
```
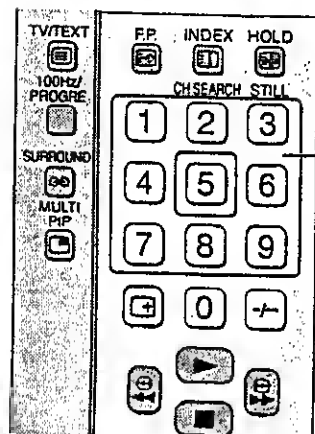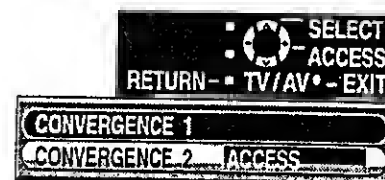
Press the Number button on the Remoe Control to select the position which you'd like to adjust.

(Example) Position [1] is selectd.
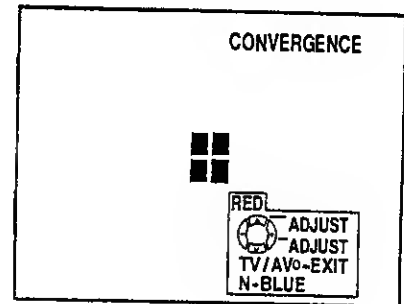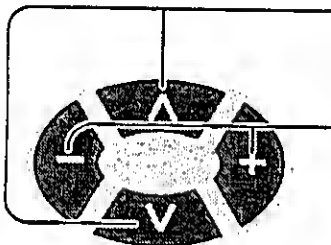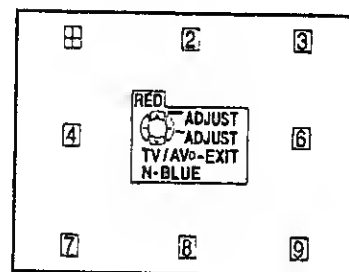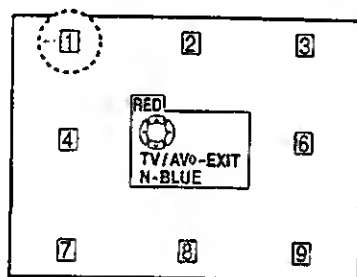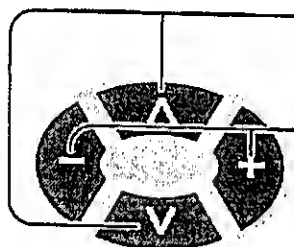
Remoto control

RED

Press to align the horizontal red line with the horizontal blue line.
(Becomes a white line)

Press to align the vertical red line with the vertical blue line.
(Becomes a white line)

Press (N) button to adjust the blue mode.
(Stores RED)
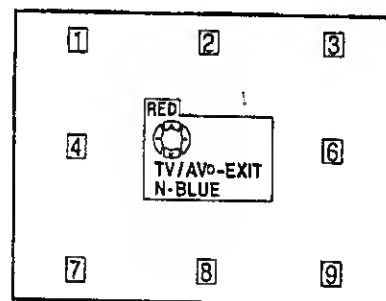
BLUE
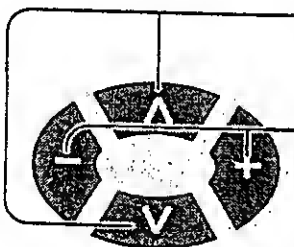
Press to align the horizontal blue line with the horizontal yellow line.
(Becomes a white line)

Press to align the vertical blue line with the vertical yellow line.
(Becomes a white line)

Repeat above adjustment for each position.
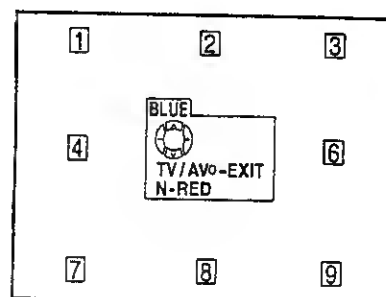
TV/AV

Press to return to the normal viewing. (Stores BLUE)

Note:

If you wish to view a video with a different colour system (PAL / SECAM, NTSC), repeat the steps above while displaying a picture.

Tuning Channels

1 Display the TUNING MENU

[1]

SET UP
⊞ ———— Press to display the
SETUP MENU.

[2]
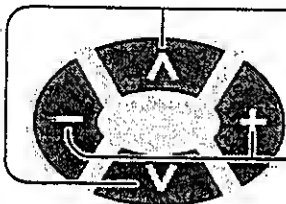
Press to select the
TUNING MENU.

Press to display the TUNING MENU.

SETUP MENU	
TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
TEXT SELECT	ENGLISH
▼	

SETUP MENU	
CHILD LOCK	OFF
PICTURE SHIFT	OFF
TUNING MENU	ACCESS
CONVERGENCE	
LANGUAGE	ENGLISH
▼	
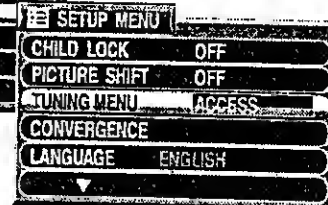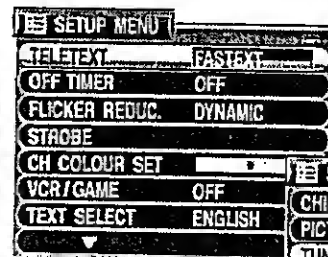
2

[1] Select the "POSITION" or the "DIRECT"

CH SELECT
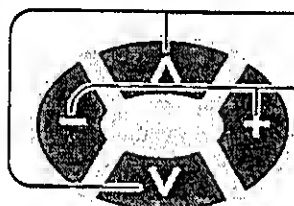
Press to select the "CH SELECT (Channel Select)" Mode.

Press to select the "POSITION" or the "DIRECT".

Setting range when the "POS." (Position) has been selected: Position 0-99
Setting range when the "DIRECT" has been selected: Channel 0-125

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	E.EUROPE
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
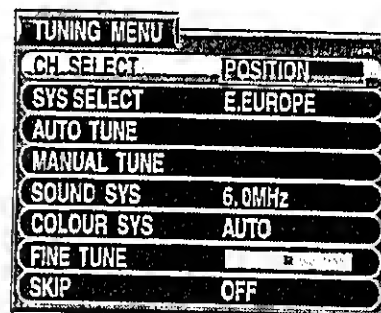
The channel select indicator will change as follows.   DIRECT ⟷ POSITOIN

[2] Regional System Selection

SYS SELECT (Before AUTO tuning and MANUAL tuning, set the "SYS SELECT" mode, as detailed below.)
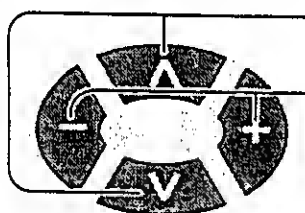
Press to select the "SYS SELECT".

Press to select the appropriate system.

The system select indicator will change as follows.

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	E.EUROPE
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

CHINA ⟷ HK/UK ⟷ M.EAST ⟷ NZ/INDONES ⟷ AUSTRALIA
JAPAN ⟷ CATV ⟷ AMERICA ⟷ SPECL VER ⟷ E.EUROPE
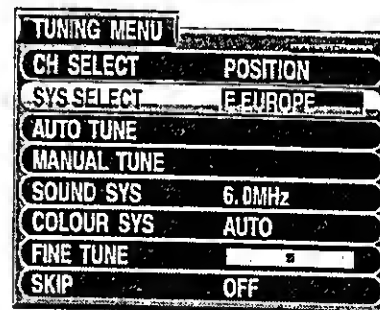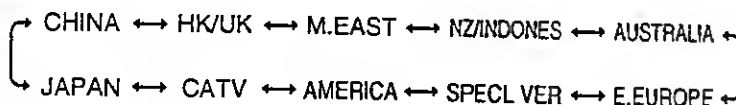
System Select by Regional

SYSTEM SELECT	Region
CHINA	China
HK / UK	Hong Kong, United Kingdom
ASIA/M.EAST	Malaysia, Singapore, Thailand, Asia countries, Kuwait, Saudi Arabia, United Arab Emirates, Middle East countries, etc.
NZ / INDONES	New Zealand, Indonesia, etc.
AUSTRALIA	Australia
E.EUROPE	CIS, Poland, etc.
SPECL VER	South Africa
AMERICA	U.S.A., Chile, Mexico, Panama, Peru, Philippines, Taiwan, Venezuela, etc.
CATV	USA CATV
JAPAN	Japan

Sound System Selection (Different region use differing systems)

This function is used only in the TV mode when the sound is not clear or no sound is produced on a Programme Number, and is not applicable in AV mode .

1
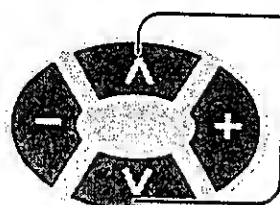
Press to select the "SOUND SYS".

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

Sound System Condition.

2
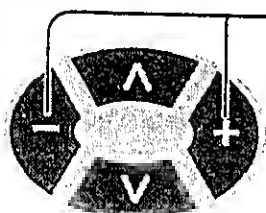
Press until the optimum sound is obtained.

The sound system will change as shown.

$$4.5\text{MHz} \longleftrightarrow 5.5\text{MHz}$$
$$\updownarrow \qquad\qquad \updownarrow$$
$$6.5\text{MHz} \longleftrightarrow 6.0\text{MHz}$$

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

Note:

These are different sound broadcast transmission systems applicable to differing countries.

3

TV/AV

Press to exit from the "SOUND SYS".

This returns the set to the normal viewing condition.

The selected Sound System is automatically memorised.

Colour System Selection (Different region use differing systems)

If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received.

1

Press to select the "COLOUR SYS".

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

Colour System Condition.

2
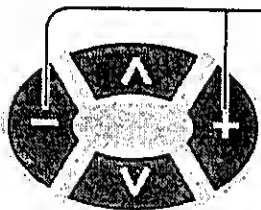
Press to produce the optimum image.

The colour system will change as shown.

→ AUTO ←→ PAL ←→ SECAM ←
→ NTSC3.58 ←——→ NTSC4.43 ←

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF
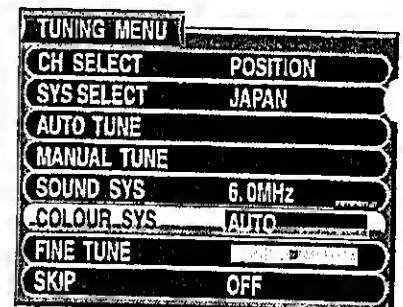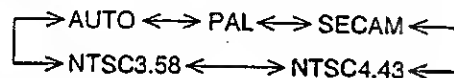
Note:
PAL, SECAM and NTSC 3.58 are different colour signal broadcast transmission systems applicable to differing countries. NTSC 4.43 Is a trick playback mode used in special VCR to playback NTSC recorded video tapes through PAL television equipment.
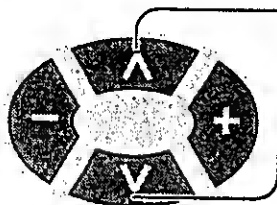
3

TV/AV

Press to exit from the "COLOUR SYS".

This returns the set to the normal viewing condition.
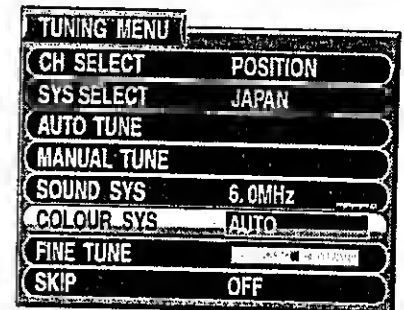
The selected Colour System is automatically memorised.

Channel Selection

Select the most easily viewed channel selection method.

2ch
4ch
6ch
8ch
10ch
12ch
14ch
16ch
18ch
20ch
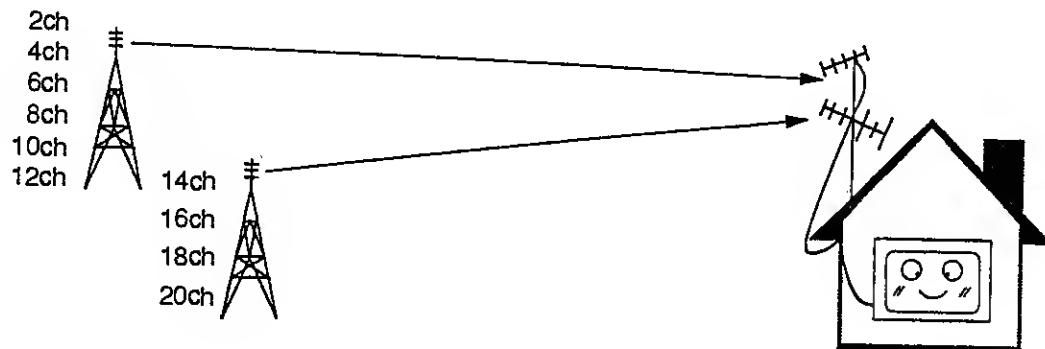
POSITION SELECT

When the Channel Selection is on POS. (Position), and Auto Tune is performed, the unit memories the channels tuned in order from programme No.1.

Press the button 🔲 to view channel 2.

Press the button 🔲 to view channel 4.

Press the button 🔲 to view channel 6.

During position mode various reception channels can be viewed.

Example

Programme Number	Channel Display	Received Channel
1	2	2
2	4	4
3	6	6
4	8	8
5	10	10
6	12	12
7	14	14
8	16	16
9	18	18
10	20	20

DIRECT SELECT

When the Channel Selection is on DIRECT, and Auto Tune is performed, the unit memories the programme number which is the same as the channel tuned.
This method allows you to select the desired channel by pushing the channel display number directly on the remote control to select the station. The channel display numbers for the broadcast stations in each region are listed on page 25.

Example

Programme Number	Channel Display	Received Channel
1	–	–
2	2	2
3	–	–
4	4	4
5	–	–
6	6	6
7	–	–
8	8	8
9	–	–
10	10	10
⋮	⋮	⋮
20	20	20
⋮	⋮	⋮

Channel Allocation

• CATV (USA CATV) channel numbers as recommended by the joint EIA/NCTA Engineering committee and published as EIA INTERIM STANDARD No.6-CABLE TELEVISION CHANNEL IDENTIFICATION PLAN-MAY 1983.
• The receiving channels are as follows;

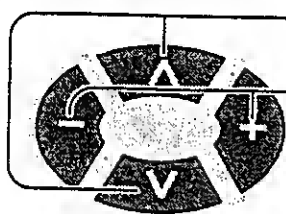| SYS SELECT / CH DISPLAY	CHINA	HK/UK	ASIA/M.EAST	NZ/INDONES	AUSTRALIA	E.EUROPE	SPECL VER	AMERICA	CATV	JAPAN
					RECEIVE CHANNEL					
0	–	–	–	–	–	–	–	–	–	–
1	1			1	0	1	1		1	1
2	2	–	2	2	1	2	2	–	2	2
3		–			2			2		
4		–			3					
5		–			4					
6		–			5					
7					S2					
≀	≀				≀				≀	
11		–	11	11		11	11			
12	12	–	12			12	12			12
13	13		–	–		–	13	13		13
14								14		
15					S10					
16		–	–	–	6	–	–			
19		–	–	–	9	–	–			
20		–	–	–	9A	–	–			
21		21	21	21	10	21	21			
22					11					
23					12					
24					S11					
≀ 28					≀					
57	57				S44					
58	–				20					
59	–				21					
62	–	62	62	62		62	62	62	62	62
63	–	63	63	63		63	63	63	63	C13
≀ 69	–	69	69	69		69	69	69		
70	–	–	–	–		–	–	–		
≀ 73	–	–	–	–		–	–	–		
74	–	S'1	S'1	S'1		S'1	S'1	–		
75	–	S'2	S'2	S'2			S'2	–		
76	–	S'3	S'3	S'3			S'3	–		
77	–	–	–			–	–	–		
78	–	–	–	–		–	–	–		
79	–	–	–	–		–	–	–		
80	–	S1	S1	S1		S1	S1	–		
81	Z1	S2	S2	S2		S2	S2	–		
≀ 89	Z9	S10	S10	S10		S10	S10	–		
90	Z10	S11	S11	S11		S11	–	–		
91	Z11	S12	S12	S12		S12	–	–		
92	Z12	S13	S13	S13		S13	–	–		
93	Z13	S14	S14	S14		S14	–	–		
94	Z14	S15	S15	S15		S15	S14	–		
95	Z15	S16	S16	S16		S16	S15	–		
96	Z16	S17	S17	S17		S17	S16	–		
97	Z17	S18	S18	S18		S18	S17	–		
98	Z18	S19	S19	S19		S19	S18	–		
99	Z19	S20	S20	S20		S20	S19	–		
							S20			
100	Z20	S21	S21	S21		S21	S21	–	99	C49
≀ 117	Z37							–	100	–
118	–				80			–		–
120	–	S41	S41	S41	–	S41	S41	–		–
≀ 125	–	–	–	–	–	–	–	–	125	–

Automatic Tune (Channel Select and Regional System must already be set; Refer to pages 21)

This TV uses automatic tuning to determine whether or not a broadcast signal is being sent which it can receive, and automatically prepares so that the channel selection can respond to both the position select and direct select modes.
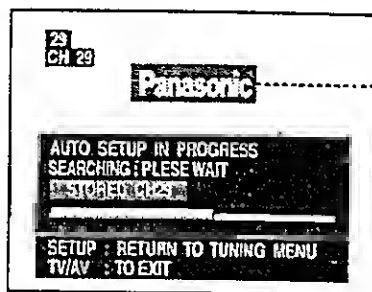
1 AUTO TUNE

Press to select the "AUTO TUNE".

Press to access to the "AUTO TUNE".

⇩ Search Start.

```
23
CH 29      Panasonic  ⋯⋯⋯⋯

AUTO SETUP IN PROGRESS
SEARCHING : PLESE WAIT
STORED CH29

SETUP : RETURN TO TUNING MENU
TV/AV : TO EXIT
```

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	ACCESS
MANUAL TUNE	
SOUND SYS	6. 0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

⋯⋯► When found a station.

The best tuning position is automatically memorized.

2 SOUND SYS

After all stations are tuned, the on-screen display will automatically change from "AUTO TUNE" to "SOUND SYS" Position.
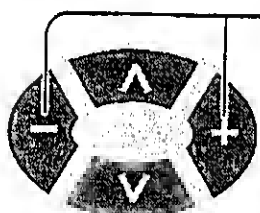
Press to improve the Sound quality, if the Sound is not clear or no sound is produced on a programme Number Position.

4.5MHz ⟷ 5.5MHz
⇕
6.5MHz ⟷ 6.0MHz

TV/AV

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

Press to exit from the Tuning Menu.
This returns the set to the normal viewing condition.

Note:
When sound volume is too small to confirm, tune it up by using the sound volume button on the remote control.

3

Press to check each station sequentially.

1 ⟳ 2 If necessary, repeat steps 1 to 2 for each Programme Number.

4

TV/AV

Press to exit from the Tuning Menu.
This returns the set to the normal viewing condition.

☀Helpful Hint

(1) If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, refer to the "Colour System Selection" operation on page 23.

(2) After the Automatic tune is finished, press this button to confirm the tuning condition for each Programme Number. If some Programme Numbers are unused (no TV stations), it is possible to skip such Programme Numbers. Please refer to the Programme Number Skip operation on page 29.
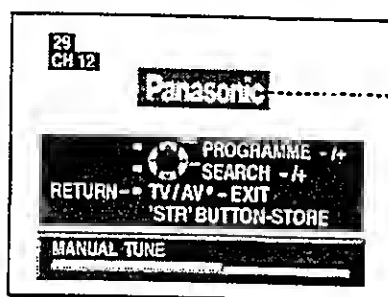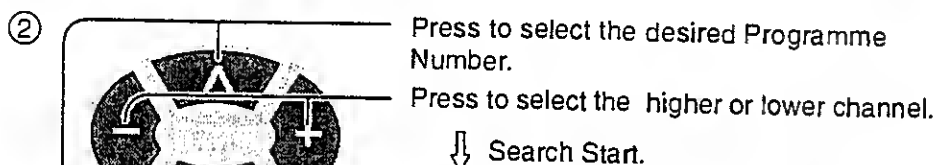
Manual Tune (Channel Select and Regional System must already be set; Refer to pages 21)
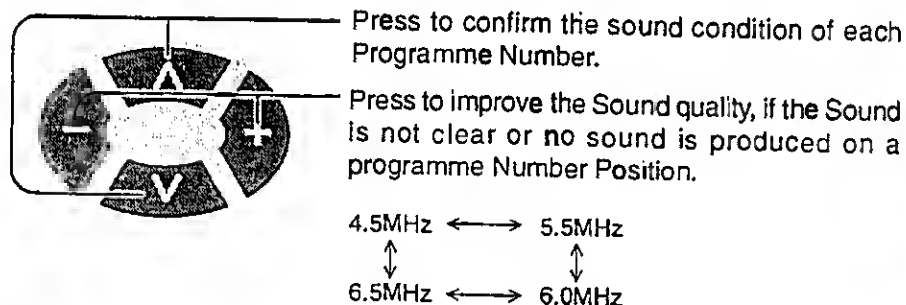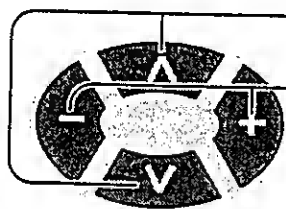
1 MANUAL TUNE

①

Press to select the MANUAL TUNE.

Press to access to the MANUAL TUNE.

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	ACCESS
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

②

Press to select the desired Programme Number.

Press to select the higher or lower channel.

⇩ Search Start.

```
29
CH 12

Panasonic ··············· ➤ When found a station.

       PROGRAMME - /+
       SEARCH - /+
RETURN- • TV/AV' - EXIT
       'STR' BUTTON-STORE
MANUAL TUNE
```

The best tuning position is automatically memorized.

2 SOUND SYS

Press to confirm the sound condition of each Programme Number.

Press to improve the Sound quality, if the Sound is not clear or no sound is produced on a programme Number Position.

4.5MHz ⟷ 5.5MHz
⇳   ⇳
6.5MHz ⟷ 6.0MHz

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

Note:
When sound volume is too small to confirm, tune it up by using the sound volume button on the remote control.

3

TV/AV

Press to exit from the Tuning Menu.
This returns the set to the normal viewing condition.

-💡-Helpful Hint

(1) If a clear picture with correct colours cannot be obtained when a Broadcast or AV signal is received, refer to the "**Colour System Selection**" operation on page 23.

(2) After the Manual tune is finished, press this button to confirm the tuning condition for each Programme Number. If some Programme Numbers are unused (no TV stations), it is possible to skip such Programme Numbers. Please refer to the Programme Number Skip operation on page 29.

(3) When using a VCR without video and audio input/output terminals, it is convenient to connect the aerial cable as indicated in the instruction manual of VCR and to set the designated channel to programme No. "0". In that case, perform manual tune after setting the colour system and sound system in advance. Further, in multi-system VCR, it is more convenient to set the designated channel to several programme Numbers.

Fine Tuning

1 FINE TUNE

Under normal reception conditions this function is not required or necessary. However, in areas of poor reception or constant interference, a slight adjustment of the tuning may improve the picture and sound quality.

Press to select the FINE TUNE.

Press until the clear picture is received.

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

2 STR

Press to store the FINE TUNE.

This stores the FINE TUNE to the selected Programme Number.

3 TV/AV

Press to exit from the FINE TUNE.

This returns the set to the normal viewing condition.

How to Cancel the Fine Tuning

Cancelling previously adjusted (manually) fine tuning, means re-activating the AFT (Automatic Fine Tuning). Re-activating the Automatic Fine Tuning means albaming the set to automatically tune to the optimum tuning position, for that programme Number.

1
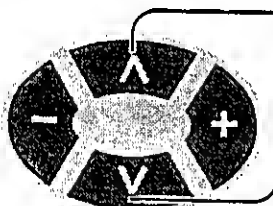
Select the Programme Number which you'd like to return to Automatic Fine Tuning (cancel the manual fine tuning).

2 SET UP

Press to display the SETUP MENU.

⇩

Proceed to the TUNING MENU (refer to page 21).

3
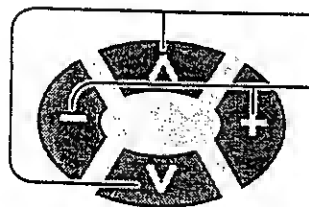
Press to select the MANUAL TUNE.

Press to access to MANUAL TUNE.
Press briefly to tune the best position.

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	ACCESS
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

4 STR

Press to store the AFT.

This stores the re-activated AFT.

5 TV/AV

Press to exit from the MANUAL TUNE.

This returns the set to the normal viewing condition.

Programme Number Skip

It is possible to skip Programme Number on which no TV stations are tuned appearing on the screen. The function is only effective when selecting Programme Numbers by pressing the Programme Number Up or Down button either on the TV set or on the Remote control.

1
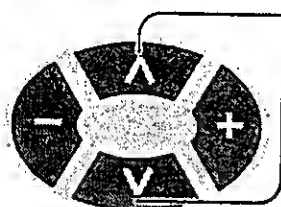
Press to select the Programme Number you'd like to skip.

2

Press to select the SKIP.

Press to change the mode to "ON.".

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	ON

3

STR

Press to store the Skip function.

⇩

TV/AV
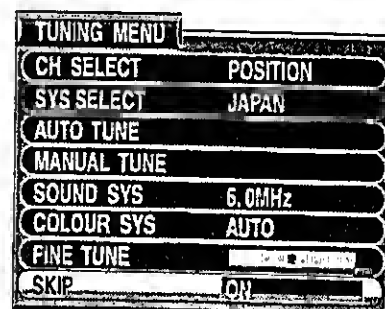
Press to exit from the SKIP.

This returns the set to the normal viewing condition.

4

Repeat Step1 to 3 for each Programme Number for which the Skip function is desired.

How to Cancel the Skip Function

1

Press to select the SKIP.

Press to change the mode to "OFF.".

TUNING MENU	
CH SELECT	POSITION
SYS SELECT	JAPAN
AUTO TUNE	
MANUAL TUNE	
SOUND SYS	6.0MHz
COLOUR SYS	AUTO
FINE TUNE	
SKIP	OFF

2

STR
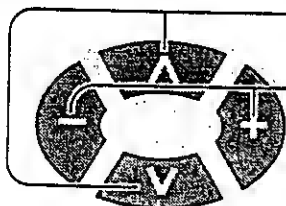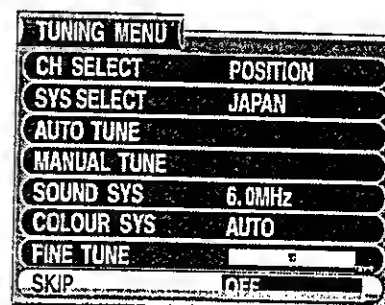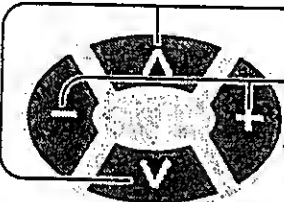
Press to store the Skip function.

Picture Adjustment

1

PICTURE

Press to display the Picture Menu.

2

Press to select the desired function.

Press to adjust or change the function.

3

TV/AV

Press to go back to watching TV.
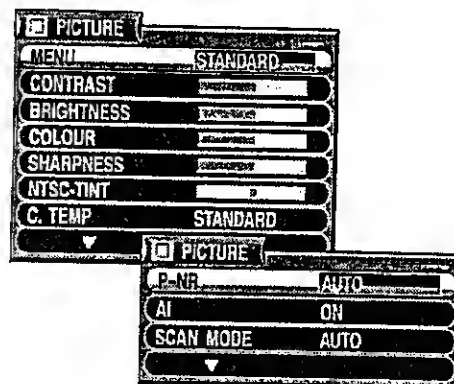
MENU

You can change the level of each Function (CONTRAST, BRIGHTNESS, COLOUR, SHARPNESS, NTSC-TINT) for each Picture Menu.
Picture menu mode will be memorized for each TV, AV1, AV2, AV3 and AV4 mode.

Picture Menu	Function
DYNAMIC	For viewing in brighter environments. This menu selects a higher than normal levels of Brightness and Contrast.
STANDARD	For viewing in normal (evening lighting) environments. This menu selects the normal levels of Brightness and Contrast.
SOFT	For viewing in a dark room. This menu selects reduced levels of Brightness and Contrast.
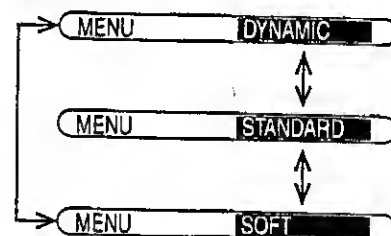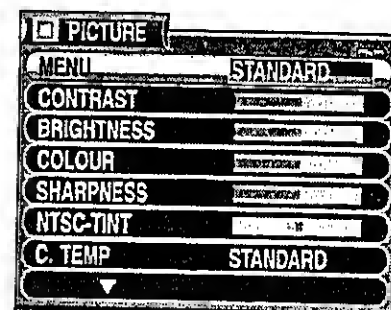
CONTRAST, BRIGHTNESS, COLOUR, SHARPNESS, NTSC-TINT

Increase or decrease the levels of CONTRAST, BRIGHTNESS, COLOUR and SHARPNESS options according to your personal preference.
With an NTSC-TINT signal source connected to the TV, the picture hue can be adjusted to suit your taste.

Item	Effect	Function
CONTRAST	Less More	Adjust for contrast.
BRIGHTNESS	Darker Brighter	Adjusts for easier viewing of dark pictures such as night scenes and hair.
COLOUR	Less More	Adjusts slightly to a lighter colour.
SHARPNESS	Less More	Displays a sharp image.
NTSC-TINT	Reddish Greenish	Adjust for proper skin colour.
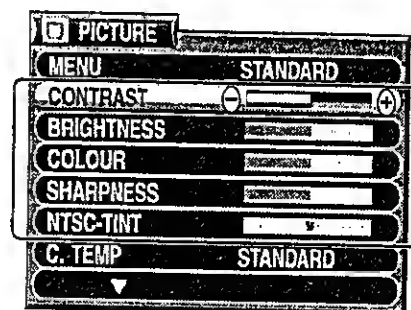
Notes:
- When set to Multi PIP mode, the main and sub pictures are both adjusted simultaneously.
- When the TV is receiving NTSC signals, NTSC-TINT is displayed and level adjustment would be possible.
- Only CONTRAST will be displayed during TEXT mode.

C. TEMP
(Colour Temperature)

Set the overall colour tone of the picture.
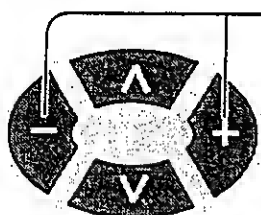
Press to switch between modes

→ STANDARD ←→ WARM ←→ COOL ←

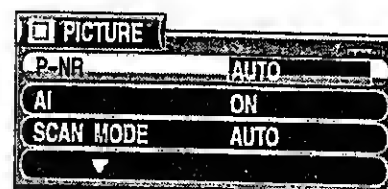| PICTURE	
MENU	STANDARD
CONTRAST	
BRIGHTNESS	
COLOUR	
SHARPNESS	
NTSC-TINT	
C. TEMP	STANDARD
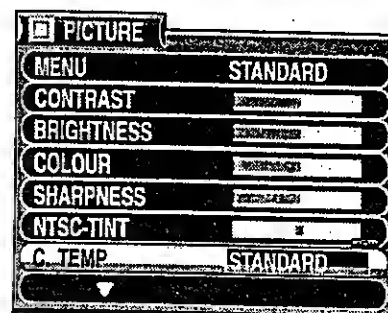
P-NR
(Picture Noise Reduction)

Automatically reduces undesired picture noise.
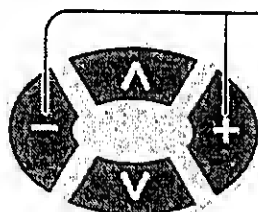
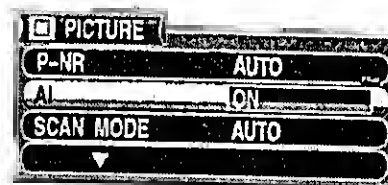Press to switch between modes

→ OFF ←→ STRONG ←
→ AUTO ←→ WEAK ←

TC- 47P500   : Switching is also possible using 🔲 on the remote control.

PICTURE	
P-NR	AUTO
AI	ON
SCAN MODE	AUTO

AI

Automatically analyses the incoming picture and processes it to give improved contrast and optimum depth of field.

TC- 47P500   : Switching is also possible using 🔲 on the remote control.

PICTURE	
P-NR	AUTO
AI	ON
SCAN MODE	AUTO

SCAN MODE

Choose the screen refresh method:
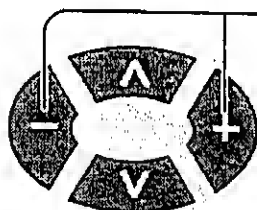
Press to switch between modes

→ AUTO ←→ 100 Hz MODE ←→ PROGRESSIVE ←

PICTURE	
P-NR	AUTO
AI	ON
SCAN MODE	AUTO
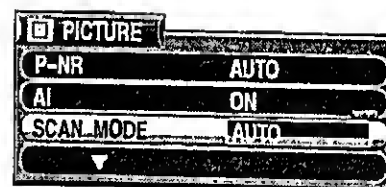
MODE	Function
AUTO	The TV software will select the best mode for the signal being viewed.
100 Hz MODE	100Hz will give a steady picture for most signal transmission.
PROGRESSIVE	Recommended when receiving NTSC signals.

Switching is also possible using 🔲 on the remote control.

Note:
We recommend that you set Scan mode to Progressive when viewing a PAL 60 or NTSC transmission. When viewing a PAL transmission (other than PAL 60) with Scan mode set to Progressive, the screen will flicker, this is not a fault.
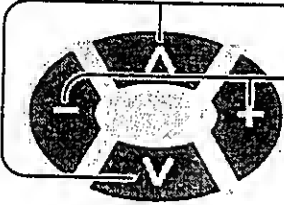
💡 Helpful Hint (ⓃNormalization)

By pressing the Normal "N" Button on the Remote Control while the Picture menu is displayed, the selected menu will be changed to the Normal Mode.
Normalization will not occur if the menu is not displayed when the "N" Button is pressed.
The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

Sound Adjustment

1

SOUND

🎵 ———————— Press to display the Sound Menu.

2

———————— Press to select the desired function.

———————— Press to adjust or change the function.

3

TV/AV

———————— Press to go back to watching TV.
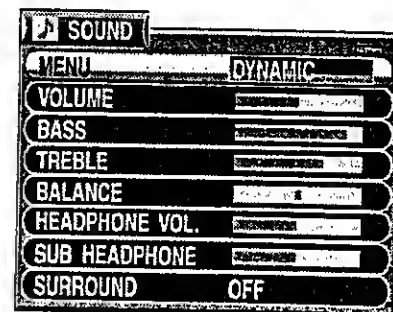
Note:

Some features are only available with the Surround feature switched off. Press ⌷ (SURROUND) to switch between On and Off.

MENU

You can change the level of each Function (VOLUME, BASS, TREBLE, BALANCE, HEADPHONE VOL, SUB HEADPHONE) for each Sound Menu. Sound menu mode will be memorized for each TV, AV1, AV2, AV3 and AV4 mode.

Sound Menu	Function
DYNAMIC	Amplifies the Low frequencies and outputs optimum sound. For music programmes for example.
STANDARD	For Normal use.
SOFT	Human voices (middle pitch sounds) will sound more clear.
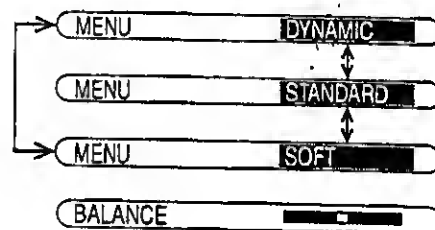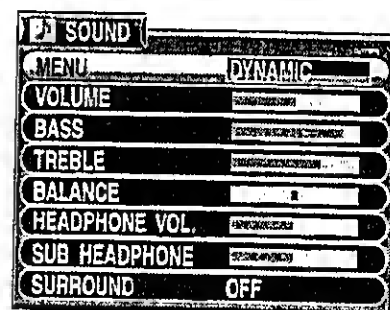
VOLUME, BASS, TREBLE, BALANCE, HEADPHONE VOL., SUB HEADPHONE

Item	Effect	Function
VOLUME	⊖ Less ⊕ More	Adjusts output volume.
BASS	⊖ Less ⊕ More	Adjusts low sounds.
TREBLE	⊖ Less ⊕ More	Adjusts high sounds.
BALANCE	⊖ Left SP ⊕ Right SP	Adjust left and right volumes.
HEADPHONE VOL.	⊖ Less ⊕ More	Adjust Headphone volume.
SUB HEADPHONE	⊖ Less ⊕ More	Adjust Sub Headphone volume.
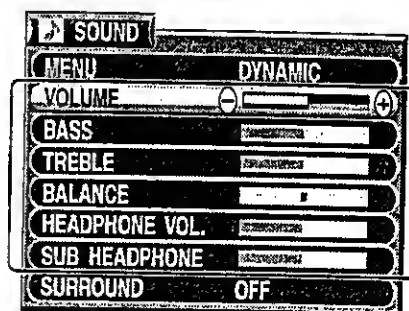
Notes:

• When set to Multi PIP mode, the main and sub sound are both adjusted simultaneously.

• When using one of the double window features, note that the headphones will relay the soundtrack for the programme in the main window, not the smaller window.

SURROUND MENU
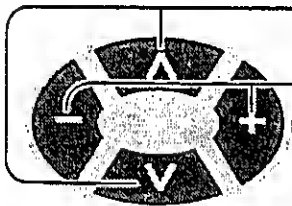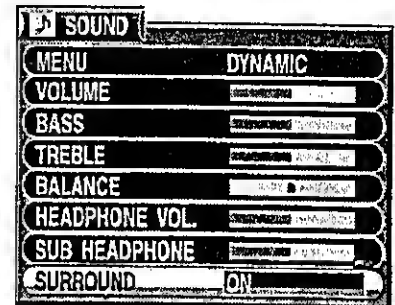
SURROUND

Press to switch between ON and OFF.

SURROUND   ON ⟷ SURROUND   OFF

OR

SOUND

Press to display the Sound Menu.

SOUND	
MENU	DYNAMIC
VOLUME	
BASS	
TREBLE	
BALANCE	
HEADPHONE VOL.	
SUB HEADPHONE	
SURROUND	ON

Press to select the SURROUND function.

Press to switch between ON and OFF.

The benefits of surround sound are enormous. You can be completely enveloped in sound; just as if you were at a concert hall or cinema.
The surround effect can be obtained without the use of external surround speakers.

Helpful Hint (ⓃNormalization)

By pressing the Normal "N" Button on the Remote Control while the Sound menu is displayed, the selected menu will be changed to the Normal Mode.
Normalization will not occur if the menu is not displayed when the "N" Button is pressed.
The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

Setup Adjustment

1

SET UP — Press to display the SETUP MENU.
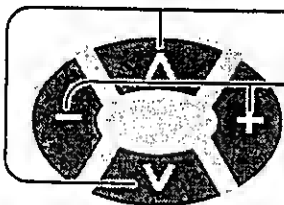
2

Press to select the desired function.

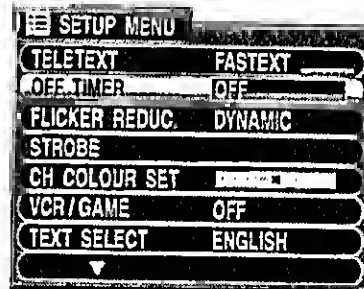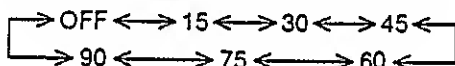Press to adjust or change the function.

**3**

TV/AV — Press to go back to watching TV.
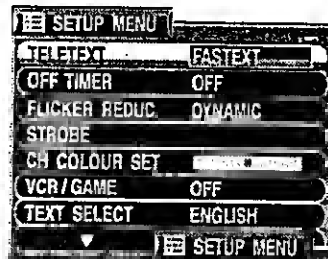
OFF TIMER

Switches the TV off within a preset time which you can choose from between 0 to 90 minutes in 15 minute intervals.

→ OFF ←→ 15 ←→ 30 ←→ 45 ←
→ 90 ←— 75 ←— 60 ←

FLICKER REDUCTION

Lets you control any picture movement. Set to Dynamic to activate motion compensation, to smooth the image and get rid of picture movement. Set to Normal to correct minor picture movement, or if slight ghosting of figures occurs when using the Dynamic setting. Set to Off to have no flicker reduction at all, occasional broadcasts may benefit from using this setting.

→ OFF ←→ NORMAL ←→ DYNAMIC ←
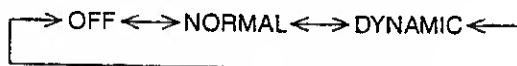
Note:
In NTSC when set the SCAN MODE to 100Hz MODE, this function is not available.
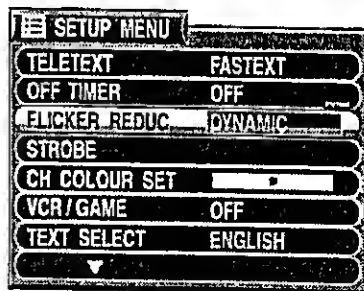
COLOUR SYSTEM

During AV mode, COLOUR SYSTEM is displayed.
If a clear picture with current colours cannot be obtained when a Broadcast or AV signal is received. The colour system will change as shown.
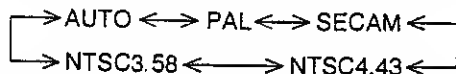
→ AUTO ←→ PAL ←→ SECAM ←
→ NTSC3.58 ←——→ NTSC4.43 ←

PAL, SECAM and NTSC 3.58 are different colour signal broadcast transmission systems applicable to differing countries. NTSC 4.43 is a trick playback mode used in special VCR to playback NTSC recorded video tapes through PAL television equipment.
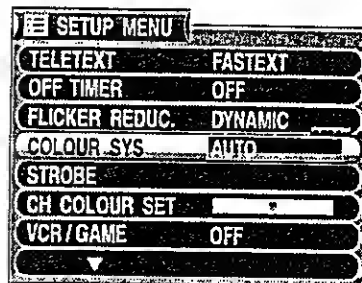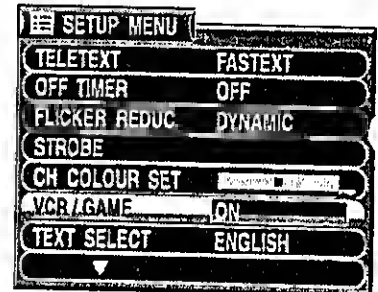
CH COLOUR SET

Colour density varying between broadcast channels can be adjusted to three levels for each reception channel.
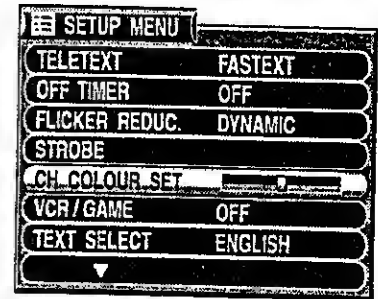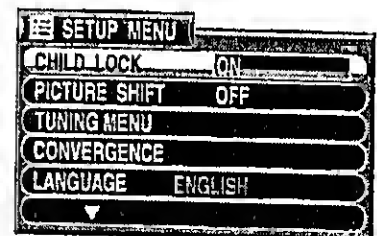
VCR/GAME

Reproduction of irregular signals, such as certain TV games and rental video tapes, may be improved.
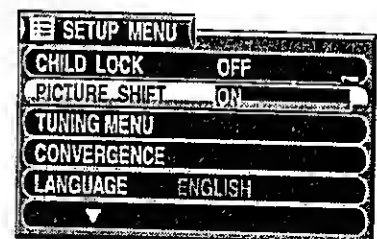
CHILD LOCK

If the Child-Lock function is set ON, picture and sound of the TV/AV mode being viewed will disappear and a Black screen will appear.
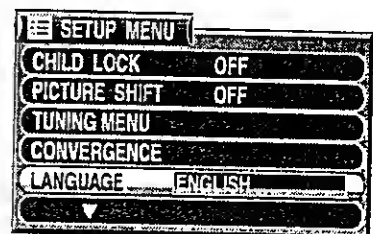
PICTURE SHIFT

For use as a screen saver, this function changes the entire picture position (shift) approximately 2 mm every 15 minutes.
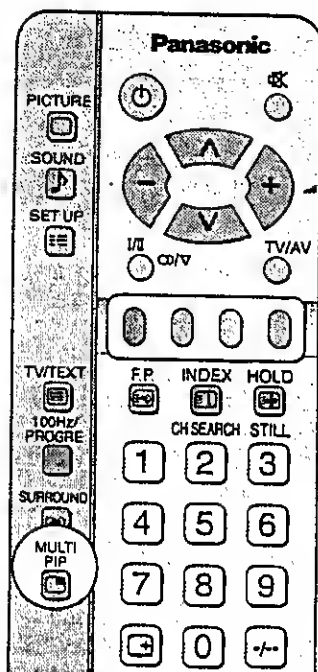
LANGUAGE

When you first install the TV, the On Screen Display language is set according to your choice of region. LANGUAGE lets you change the language used for On Screen Displays.

Multi Screen

Multi PIP

Press _{MULTI PIP} to select the current programme, the **picture in picture** feature, or the **picture and picture** feature.

The on screen selector keys for the features (corresponding to the four coloured buttons on the remote control) appear and disappear after a few seconds. If you'd like to select an operation when the keys are not shown, press _{MULTI PIP} once more and the keys will reappear.
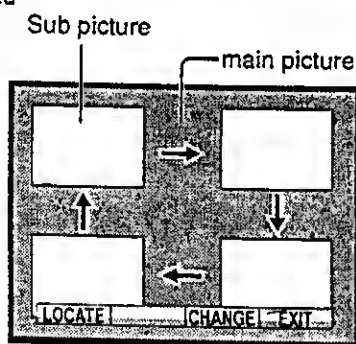
Picture in Pcture (PIP)

MULTI PIP

Press to view two pictures (sub picture in main picture) at the same tme.
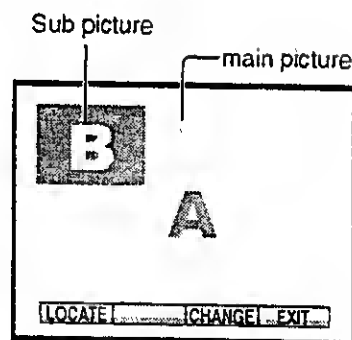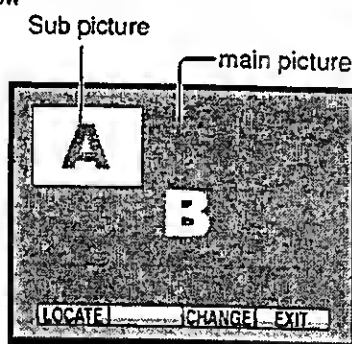
LOCATE		CHANGE	EXIT
Red	Green	Yellow	Blue

Press the Red button:
Red
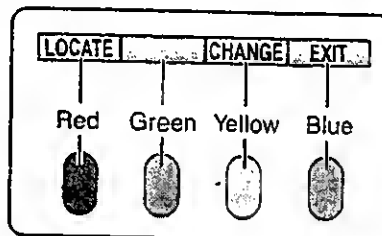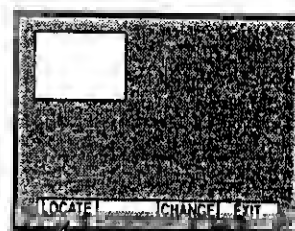
Sub picture — main picture

Each time the location of the sub picture is changed.

Press the Yellow button:
Yellow

Sub picture — main picture

A ⟳ B

Sub picture — main picture

Each time the main picture and the sub picture are swapped.

Press the Blue button to exit from the PIP mode.
Blue

Picture and Picture

MULTI PIP

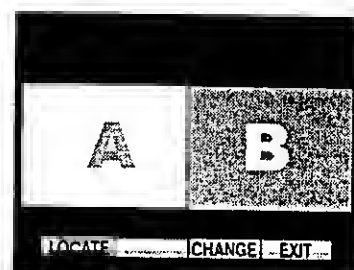Press twice to view two pictures (picture and picture) at the same time.

Press the Yellow button:
Yellow Each time the picture in the left and the picture in the right are swapped.

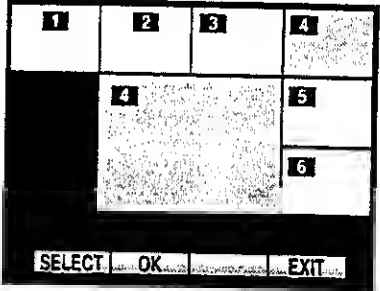**Press the Blue button to exit from the PIP mode.**
Blue

Channel search

INDEX
🖳
CH SEARCH (CH SEARCH 🖳) ——— Press to show freeze-frames of the programmes being broadcast on all of the stored channels. These images are displayed in series clockwise around the edge of the screen, starting from the top left.
The current programme is displayed in the centre of the screen, still playing.

HOLD
🖳
STILL (STILL 🖳) ——— Press to pause the search.

INDEX
🖳
CH SEARCH (CH SEARCH 🖳) ——— Press to exit from the feature.

Red Green Yellow Blue

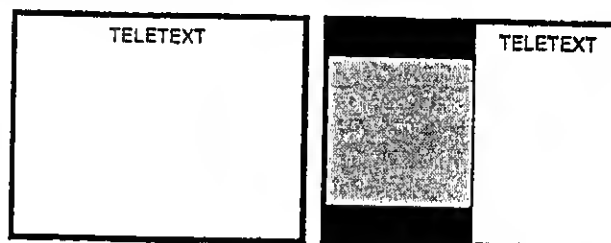Channel search

——— Press to watch the current programme (displayed centre screen), exiting the feature.

——— Press to watch the selected channel, exiting the feature.

——— Press to select each channel's freeze-frame in turn.

Picture and text (No indication for · TC-47P500)

TV/TEXT
🖳 ——— Press to select watching the current programme, the teletext or the picture and text feature.

TELETEXT mode   Picture and text mode

Note:
The remote control affects the teletext page; so select watching the current programme before making any changes to the programme.
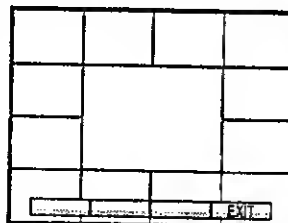
Still

HOLD
🖳
STILL (STILL 🖳) ——— Press to freeze the picture, press again to return to watching the current programme.

Strobe

Lets you take a series of freeze-frame photos of a piece of action (for example: the finish of a race).

(Access Strobe via the Setup menu, see page 34). Takes a series of up to twelve freeze-frame images (one second delay between each image being taken) from the current programme watched.

SETUP MENU

TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	ACCESS
CH COLOUR SET	n
VCR / GAME	OFF
TEXT SELECT	ENGLISH
▼	

HOLD
🖳
STILL (STILL 🖳) ——— Press to pause (freeze) the Strobe, press again to continue taking the freeze-frames.

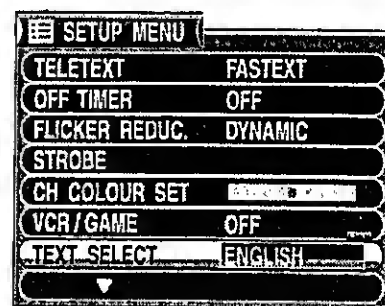Blue ——— Press to exit from the Strobe feature and return to watching the current programme.
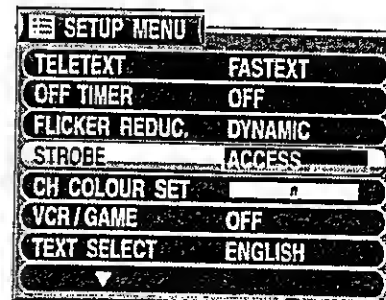
Teletext features may vary depending on the Broadcasting Companies and are only available when the channel selected is transmitting Teletext.

TEXT SELECT
(No indication for
TC-47P500)

Select character set, so that all characters needed are available for text on teletext pages (eg: cyrillic characters, etc).

$\rightarrow$ ENGLISH $\longleftrightarrow$ CIS $\longleftrightarrow$ E.EUROPE $\leftarrow$

SETUP MENU	
TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
TEXT SELECT	ENGLISH
▼	

TV / Teletext mode

TV/TEXT

Press to select the current programme, the teletext and the picture or the teletext feature
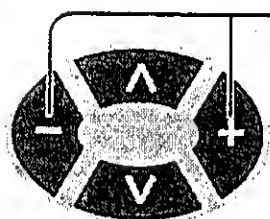
PICTURE

Press to display the contrast function with a cyan bar.

SOUND

Press to display the volume function with a green bar.
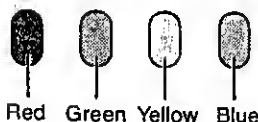
Press to alter the setting as required.

CONTRAST

VOLUME

SET UP

Press to display special function options at the bottom of the screen.

Press to select the desired function.

Red Green Yellow Blue

LIST / FASTEXT mode

Choose 2 modes.
LIST $\longleftrightarrow$ FASTEXT

LIST mode:

Four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

FASTEXT mode:

Four differently coloured subjects are situated at the bottom of the display. To access more information , press the appropriately coloured button. This mode enables fast access to information on the subjects shown.
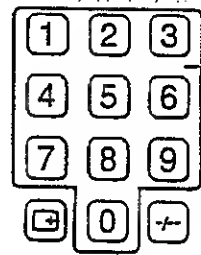
SETUP MENU	
TELETEXT	FASTEXT
OFF TIMER	OFF
FLICKER REDUC.	DYNAMIC
STROBE	
CH COLOUR SET	
VCR / GAME	OFF
TEXT SELECT	ENGLISH
▼	

Note:

Characters will be illegible unless you select the Text Language which matches the text being received. Select the correct LANGUAGE (Refer to page 35).

Page Selection
(Two ways)
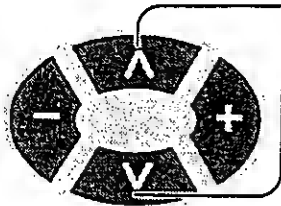
Press to increase or decrease
the page number by one.

Enter the page number
directly using 0-9 on
the remote control.

Full / Bottom

SET UP + Green

Press to display special functions.
Press the **Green** button again to expand the BOTTOM half.
Press again to return to normal (FULL) size.

Reveal

SET UP + Red

Press to reveal hidden words e.g. quiz page answers. Press again to hide.

List Store

In LIST mode the four page numbers can be altered (programme positions 1 - 25 only).
Press one of the four coloured buttons and enter the new page number.

STR

Press and hold, the page numbers will change to white indication and the page is stored.

Hold

HOLD / STILL

Press to hold the Teletext page when viewing multi-page information.
Press again to return to automatic page update.

Favourite Page (F.P.)

Blue + 0 ~ 9 + STR

Stores a favourite page in memory for instant recall. (programme positions 1 - 25 in List
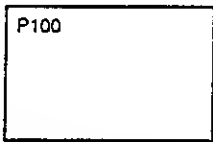mode only).
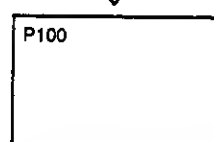Press the **Blue** button, select the page number, then press and hold STR.
The page number is now stored.
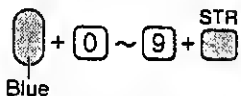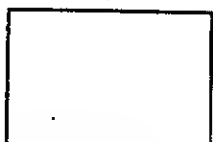
F.P.

Press to recall the stored page number.

TELE TEXT

|	Teletext page	News Flash	Update
SET UP [icon] + [Yellow icon] Yellow	Press to display special functions to view the TV picture whilst searching for a Teletext page. ⇩ P100 When found a page.	Press to view the TV picture When a news flash page has been selected. ⇩ TV picture viewing	Press to see the update of information on certain pages. ⇩ P100 When an update is received.
[Yellow icon] Yellow	Press to view the page.	Press to display the News Flash.	Press to view the page.
TV/AV [icon]	Return to normal TV operation.		

Index

INDEX [icon] ———— Press to return to the main index page.
CH SEARCH
Depending on the way information is transmitted, this may have to be pressed more than once to return to the main index page.

Sub Coded Page Access   When Teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require.
It is possible to enter your required sub page and continue watching the normal programme until the correct sub page is found.

[0] ~ [9]   Select the required page number using buttons 0 - 9.
If the top of the page indicates that sub pages are being transmitted yet the page does not change, then the number at the top of the page is there to indicate that the broadcaster has updated the page's contents, there are no sub pages.

SET UP [icon] + [Blue icon]
Blue

T**** ⇨ T0006
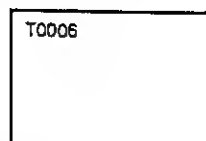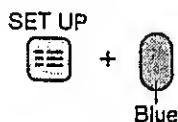
Enter desired sub page number before the T"" disappears. To select page 6 enter 0, 0, 0 and 6.

[Yellow icon]
Yellow   Viewing a normal TV programme. ⟵⟶   Viewing the Teletext page.
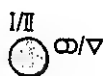
[0] ~ [9]   Select a new page number.

TV/AV [icon] ———— Press to return to normal TV operation.

Advanced Remoto Control Operation

Stereo Bilingnal Sound Selection

I/II ⊙ ∞/▽

When you receive the stereo/bilingual sound system, sound output modes can be selected by pressing the stereo/bilingual sound selection button.

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	∞	I	II	▽

NICAM ....used in Australia, Malaysia, Thailand, Indonesia etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator ⟷ ▽	I ⟷ ▽	∞ ⟷ ▽	I ⟶ II / ⟶ ▽ ⟵

.2(German) ....used in New Zealand, Malaysia, Singapore, China.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator ⟷ ▽	I ⟷ II	∞ ⟷ ▽

Notes:
- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the "MONO" position, using the stereo/bilingual sound selection button.
- "DUAL", also known as "DUAL MONO" or as "BILINGUAL" is not currently transmitted in some countries.

VCR / LD / DVD Control

`he Remote Control is capable of operating some functions of selected Panasonic VCRs, LD and DVD (Digital Versatile Disc) equipment. Some VCR, LD and DVD equipment have different functions. So to ensure compatibility please refer to the equipment's instruction book or consult your dealer for details.
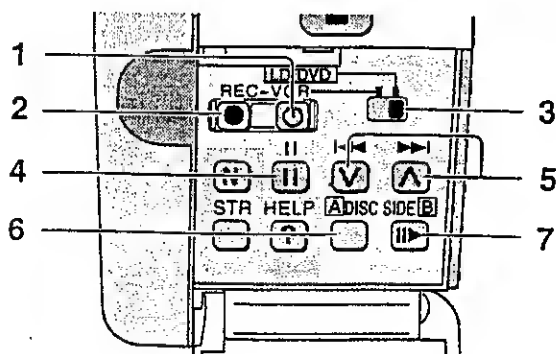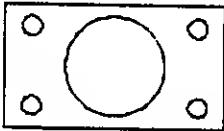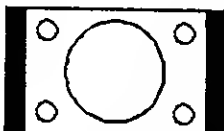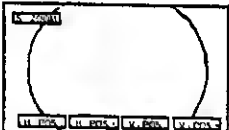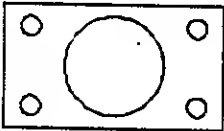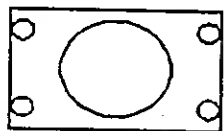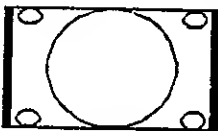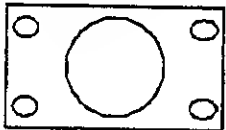
	Button	Function	
		VCR	LD/DVD
1	⊙	Power Switch	
2	●	REC (Record)	
3	▥	VCR/LD, DVD Select button	
4	II	Pause/Still	
5	⏮ ⏭ V Λ	Programme Number Up and Down	Programme Skip
6	A DISC		DISC SIDE A Selection
7	SIDE B	Still Advance	DISC SIDE B Selection

Aspect Controls
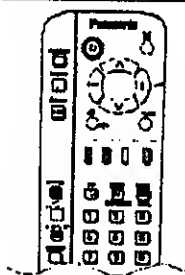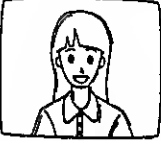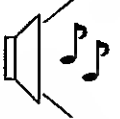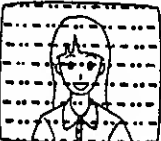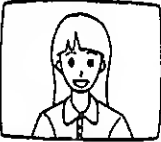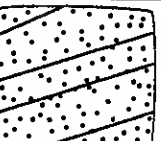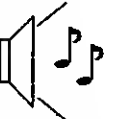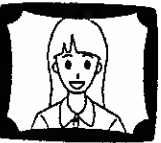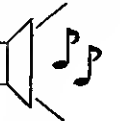
Press the ASPECT button ⊞ to select the different Aspect options. The options available are AUTO, 4:3, ZOOM, S-ZOOM, 16:9, 14:9 and JUST.

Mode	Picture	Description
AUTO	16:9 Signal 4:3 Signal	The AUTO position can be set to 4:3 or to JUST. When a wide screen signal is detected at the Video terminal the TV will select the16:9 aspect ratio.
4 : 3		This option will display a standard 4:3 picture without any stretching or compression. There will be vertical black lines down either side of the picture
ZOOM		This option allows you to magnify part of the picture. The coloured buttons let you change the position of the magnified area. Red H POS - Move picture Left Green H POS + Move picture Right Yellow V POS - Move picture Down Blue V POS + Move picture Up
S - ZOOM		S-ZOOM displays part of the picture at greater magnification that the ZOOM mode does. The coloured buttons let you change the position of the magnified area as shown for ZOOM..
16 : 9	16:9 Signal 4:3 Signal	The 16:9 option will display the picture at its maximum size. Signals in the 4:3 format will be stretched to fit the picture.
14 : 9		The 14:9 option will display a 4:3 signal in simulated wide screen. The picture is slightly stretched. It is also slightly cropped top and bottom.
JUST		JUST gives you a "best fit" option when showing 4:3 on wide screen. The centre of the picture is not affected but there is some stretching at the edges.

Troubleshooting

Before you call for service, determine the symptoms and make a few simple checks as shown below.

Symptoms		Checks
Picture	**Sound**	
Snowy Picture	Noisy Sound	Aerial Location, direction or Connections
Multiple Image	Normal Sound	Aerial Location, direction or Connections
Interference	Noisy Sound	Electrical Appliances Cars/Motorcycles Fluorescent Lamps
Normal Picture	No Sound	Volume (Refer to page 15) (Check whether the mute function has been activated on the Remote Control.)
No Picture	No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness/Volume setting (Check by pressing the Power Switch or Stand-by Button on the Remote Control.)
No Colour	Normal Sound	Colour Control (Refer to page 30, 31) Colour System (Refer to page 34)
Scrambled	Normal or Weak Sound	Retune Channels (Refer to page 21)
Coloured Patches	Normal Sound	Magnetic interference from unshielded equipment; TV set moved while "ON". Turn the TV set off for 30 minutes, using the "Power" Switch on the TV set.
No Colour	Noisy Sound	Sound Menu (Refer to page 32) Picture Menu (Refer to page 30)

Specifications

	TC-47P500H TX-47P500H	
Power Source	AC 220-240 V, 50/60 Hz	
Power Consumption	218 W Stand-by condition 3.0 W	

Receiving System

21 Systems		Function	21 Systems		Function
1	PAL B, G, H	Reception of broadcast transmis-sions and Playback from Video Cassette Tape Recorders.	15	PAL 60 Hz/5.5 MHz	Playback from Special Disc Players and Special VCR's
2	PAL I		16	PAL 60 Hz/6.0 MHz	
3	PAL D, K		17	PAL 60 Hz/6.5 MHz	
4	SECAM B, G		18	SECAM 60 Hz/5.5 MHz	
5	SECAM D, K		19	SECAM 60 Hz/6.0 MHz	
6	SECAM K1		20	SECAM 60 Hz/6.5 MHz	
7	NTSC M (NTSC 3.58/4.5 MHz)		21	NTSC 50 Hz/4.5 MHz	
8	NTSC 4.43/5.5 MHz	Playback from Special VCR's			
9	NTSC 4.43/6.0 MHz				
10	NTSC 4.43/6.5 MHz				
11	NTSC 3.58/5.5 MHz				
12	NTSC 3.58/6.0 MHz				
13	NTSC 3.58/6.5 MHz				
14	SECAM I				

Receiving Channels	Regular TV **VHF BAND** 2-12 (PAL/SECAM B, K1) 0-12 (PAL B AUST.) 1-9 (PAL B N.Z) 1-12 (PAL/SECAM D) 1-12 (NTSC M Japan) 2-13 (NTSC M U.S.A) **UHF BAND** 21-69 (PAL G, H, I/SECAM G, K, K1) 28-69 (PAL B AUST.) 13-57 (PAL D, K) 13-62 (NTSC M Japan) 14-69 (NTSC M U.S.A) **CATV** S1-S20 (OSCAR) 1-125 (U.S.A CATV) C13-C49 (JAPAN) S21-S41 (HYPER) Z1-Z37 (CHINA) 5A, 9A (AUST.)
Receiving Stereo System	NICAM I, NICAM B/G, NICAM D, A2 (German)
Tuning System	Frequency synthesizer Auto Search Tuning POSITION : 100 Position DIRECT : 125 Position
Audio Output	24 W [2-way, 4-speakers ; 12 W + 12 W] (10 % THD)
Headphones	3.5 mm Plug
Aerial impedance	75 Ω Unbalanced coaxial

Video/Audio/Component Terminals	AV 1, 2, 3, 4 S-Video In Y:1 Vp-p, 75 Ω
	    C:0.3 Vp-p, 75 Ω
	    DVD (Y/PB/PR)
	    Video In 1 Vp-p, 75 Ω
	    Audio In Approx. 0.4 V 47 KΩ
	Monitor Out Video Out 1 Vp-p, 75 Ω
	
	AV1 IN (Rear) : S-Video, Video, Audio L/R terminals
	AV2 IN (Rear) : Video or Y/PB/PR, Audio L/R terminals
	AV3 IN (Front) : S-Video, Video, Audio L/R terminals
	AV4 IN (Rear) : Video or Y/PB/PR, Audio L/R terminals

Remote control Transmitter	R6 (AA) Battery × 2

	TC-47P500H , TX-47P500H	
Dimensions (W × H × D)	1095 mm × 540 mm × 1190 mm	
Mass (Weight)	59 kg (Net)	

Note: Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

Customer's Record
The model number and serial number of this product can be found on its cabinet. You should note this serial number in the space provided below and retain this book plus your purchase receipt as a permanent record of your purchase to aid in identification in the event of theft or loss and for Warranty Service purposes.

Model Number _____   Serial Number _____